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THE GENERAL ECONOMY

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Introduction

This report serves as a general summary and background frame of reference for the detailed industry reports prepared for the Council on Environmental Quality. It estimates the macroeconomic effect of the sum of the requirements for pollution control standards for all of the industries examined in those reports. We have taken the costs of pollution control, as estimated by CEQ and EPA, which have been incorporated in those reports, and have applied price mark-up factors to determine the amount of price increase at the industry and macroeconomic levels. We have also analyzed the effects of increased investment which will be required by existing pollution control legislation. The Chase Econometrics macroeconomic model is then used to determine what effect these changes in costs, prices, and investment will have on the overall economy. Key variables which we examine include the aggregate price indexes, the unemployment rate, output, and the net foreign balance. We have calculated the effects both under the assumption that the government takes no action to offset the rising unemployment and lower real output and under the assumption that the government uses monetary and fiscal policy to return the economy to the same level of output and employment, but at the cost of higher prices. Simulations of this nature have been prepared for both "full employment" and "recession" scenarios; however we discuss only the full employment runs in this summary. While we have used the CEQ and EPA figures on pollution control costs as our best estimates, we have also taken 75%, 125%, and 150% of the estimated values as plausible alternatives and have prepared simulations for these cases as well. We do not discuss these calculations in the summary except for a brief mention of the 150% case, since in our opinion this serves as a realistic upper limit for the expected cost increases.

In the remaining sections of this summary, we discuss the methodology used in moving from industry costs to macroeconomic prices and quantities, the types of simulations which have been calculated, and the major findings and implications of these simulations. In the conclusion we comment briefly on the major policy variables affected by the implementation of existing pollution control legislation and outline various policies which could be used to mitigate unfavorable movements in these variables.

Methodology

In this study we have combined the Chase Econometrics Macroeconomic Model and Inter-Industry Forecasting System to estimate the effects which cost increases in certain specified industries will have on the overall economy. Of primary interest are the effects on prices, output, employment, and foreign trade. In this section we outline the major steps which are taken in this procedure.

1. We calculate the percentage cost increase faced by each major polluting industry. In doing this, we use the numbers supplied by CEQ and EPA on the actual cost increases for the industries with largest pollution control costs. These figures, available annually, include both capital costs (on an annualized basis) and operating expenses. They are available for the fifteen industries in which pollution control expenditures are expected to be the most significant. The actual and percentage cost increases are given in Table 1.

2. We translate the percentage cost increases into percentage price increases. The "mark-up" factors, which represent the proportion of additional costs passed along as higher prices, have already been calculated on an industry-by-industry basis in the Chase Econometrics industry models. These mark-ups, as

Table I

	Food and Kindred Products (I/O 14)		Textile Mill Products (I/O 16)		Lumber and Wood Products (I/O 20)		Paper and Products (I/O 24)		Chemicals & Products (I/O 27)	
	Change in annualized costs* (millions of 1971 $)	As a fraction of value added	Change in annualized costs* (millions of 1971 $)	As a fraction of value added	Change in annualized costs* (millions of 1971 $)	As a fraction of value added	Change in annualized costs* (millions of 1971 $)	As a fraction of value added	Change in annualized costs* (millions of 1971 $)	As a fraction of value added
1972	29.1	.08	7.2	.13	2.7	.04	32.4	.35	35.8	.27
1973	30.5	.08	7.8	.13	2.7	.04	35.8	.37	41.9	.30
1974	32.5	.08	8.4	.14	2.8	.04	40.5	.43	61.4	.42
1975	34.2	.08	8.5	.14	2.9	.04	51.8	.50	78.9	.52
1976	36.3	.09	9.3	.15	3.0	.04	39.2	.36	54.7	.34
1977	14.2	.03	4.1	.06	0.8	.01	15.9	.14	30.0	.18
1978	14.3	.03	4.0	.06	0.9	.01	16.1	.14	29.4	.17
1979	14.6	.03	4.2	.06	0.8	.01	16.0	.13	29.9	.16
1980	14.6	.03	4.4	.06	0.8	.01	16.3	.13	30.5	.16

	Plastics (I/O 28)		Petroleum Refining (I/O 31)		Leather (I/O 33)		Stone & Clay Prod. (I/O 36)		Primary Iron & Steel (I/O 37)	
1972	2.78	.05	12.9	.19	2.11	.59	8.05	.10	44.8	.26
1973	2.98	.04	19.0	.27	2.14	.58	10.42	.13	121.6	.70
1974	3.06	.04	50.3	.67	2.17	.57	20.97	.25	330.9	1.85
1975	3.21	.04	56.5	.71	2.17	.55	23.87	.27	373.3	2.03
1976	3.30	.04	29.9	.36	2.17	.54	11.24	.13	122.3	.65
1977	1.70	.02	10.3	.12	.37	.09	2.89	.03	24.2	.13
1978	1.60	.01	10.1	.11	.38	.09	2.99	.03	27.6	.14
1979	1.50	.01	10.2	.11	.38	.09	2.99	.03	27.7	.14
1980	1.60	.01	10.3	.10	.38	.08	2.99	.03	27.8	.13

	Primary Nonferrous Metals (I/O 38)		Motor Vehicles & Equip. (I/O 59)		Aircraft and Parts (I/O 60)		Elec.,Gas,Water & Sanitary Services (I/O 68)		Wholesale & Retail Trade (I/O 69)	
1972	30.8	.39	1.78[a]	.06[b]	.76	.01	123.0	.50	6.6	.00
1973	49.7	.61	1.81	1.44	.77	.01	274.7	1.03	6.6	.00
1974	142.9	1.69	1.92	1.39	.83	.01	430.7	1.53	25.3	.02
1975	161.4	1.84	2.04	4.36	.88	.01	483.2	1.63	28.7	.02
1976	60.2	.66	2.07	2.63	.88	.01	176.9	.57	12.3	.01
1977	18.4	.19	.87	.00	.37	.00	65.8	.20	1.5	.00
1978	18.5	.19	.88	.00	.37	.00	73.1	.20	1.5	.00
1979	18.7	.18	.88	.00	.38	.00	73.3	.19	1.5	.00
1980	18.7	.18	.88	.00	.38	.00	73.6	.18	1.5	.00

[a]Incremental cost over previous year

[a]Excluding mobile source emission control standards

[b]Including mobile source emission control standards

might be expected, all range from 0.8 to 1.0 in the manufacturing sector.

3. We then calculate how these price increases will affect all other industries. In the previous step we calculated only the direct effect of pollution controls on prices; that is, the amount that the price of steel (e.g.) rises because pollution control equipment is now used by the steel industry. However, we must also consider the effect which an increase in steel will have on machinery, autos, and other steel-using industries. In other words, we must measure the indirect as well as the direct effect of the price increases in each industry.

The input/output table is particularly well suited for this, since itspecifically measures both direct and indirect effects and combines them in a single table; that is, we use the coefficients from the I/O table entitled "Total Requirements Per Dollar of Delivery to Final Demand". These coefficients are input weights, and are thus the correct ones to use in determining the total increase in product prices caused by increases in input prices.

4. We convert the price increases of final demand categories to those for aggragate demand categories. We must use a reverse bridge matrix to go from the 80 categories of final demand to the approximately 40 categories of aggragate demand contained in the Chase Econometrics macromodel. For example, we must convert the price increase in the food industry to an increase in the consumer price index for food.

5. Next we translate the ex ante price increases at the aggregate demand level which we have just calculated into actual ex post price changes. Until this has been accomplished we do not yet know what changes in final product

prices will be, since the cost increases may not be fully passed along. We use the mark-up factors at the final demand level (consumption, investment, and exports) to determine how much prices will initially rise.

6. Finally we calculate the equilibrium changes in prices and other variables by solving the complete macroeconomic model. The final price rises, after the dynamics of the system have come into play, are likely to be substantially different from the impact increases. First, higher prices will in general lead to lower output, which results in lower capacity utilization and hence a slightly smaller mark-up factor. In addition, lower output leads to higher unemployment, somewhat smaller wage demands, and thus lower unit labor costs and prices. On the other hand, higher prices usually lead to greater wage demands, which in turn raise unit labor costs and prices. These two effects are, of course, offsetting, and there is no a priori way to determine which one will predominate in any given situation.

7. In addition we must adjust for changes in fixed business investment. We have so far discussed changes in the price terms only, yet the cost and price increases occur because of the increased investment required by the pollution control standards. We should adjust investment as well. Since more investment will be needed, the constant term in the investment function is raised by the incremental expenditure. However, more investment for a given set of monetary conditions will result in somewhat higher interest rates and greater credit rationing, and hence a decline in other investment, although the reduction will be felt more strongly in housing than in producers durable equipment.

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In addition, the user cost of capital will rise somewhat, since it will now take more investment to produce a given amount of output. Hence the required rate of return on productive investment will have to increase to offs

6 offset

the zero return on non-productive investment. Some investment projects which otherwise could have been undertaken will be cancelled because of the increased expense, which will cause a decline in productive investment in constant dollars.

It should be pointed out that an increase in investment would ordinarily lead to an increase in labor productivity and hence a decline in the labor/output ratio. However, since investment for pollution control purposes is not considered to be productive investment, there will be no such substitution effect between labor and capital. Thus we have in addition adjusted the model to reflect the fact that there is no net increase in the productive capital stock.

Background for Simulations

As mentioned above, we have prepared simulations for both the "full employment" and "recession" cases, partly because of the possibility that the economy will not return to full employment in the near future, and partly to measure the differential effects of a given cost increase at 4½% and 6% unemployment. However, since the industry reports have all been prepared using the assumptions of a full employment economy and a constant rate of growth, we restrict our remarks in this summary to an examination of the effects on the economy at full employment.

In projecting the economy to 1980 using a full employment scenario, we have adjusted fiscal and monetary policy to achieve the following results:

1. The unemployment rate remains at approximately 4.5% during the latter half of the 1970's.

2. The rate of inflation, as measured by the implicit GNP deflator, fluctuates between 3 and 4% during the decade but declines to 3% by 1980.

3. The economy grows at an average rate of 4 1/3% in constant prices during the 1976-1980 period.

4. The Federal government budget registers a slight surplus during this same period.

Using these standards to formulate a "baseline" simulation, we have then calculated the effects of additional costs caused by the implementation of existing pollution control standards. The cost estimates supplied by CEQ and EPA can be denoted as the "median change" case. We then calculate the effect of increases in costs which are 75%, 125%, and 150% of the median change.

In addition to determining how the economy would be affected by different levels of pollution control costs, we have also prepared additional simulations where we use monetary and fiscal policy to return the economy to the level of output and unemployment which would have existed without any pollution control costs - i.e., the baseline estimates. These simulations, known as the "offset" runs, are also calculated for the various cost levels listed above.

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In the median change run without offsets, unemployment rises by approximately 0.2% by 1976. Because unemployment is higher, wage rates rise at a slightly slower rate and hence unit labor costs are slightly lower. This in turn causes prices to rise at a slightly lower rate during the 1976 1980 period. The net result is that by 1980 the consumer price index return to its baseline level, although the implicit GNP deflator and the wholesale price index are still somewhat higher. Furthermore the relative decline in prices from 1976 to 1980 causes slightly larger increases in real output, hence narrowing the unemployment differential between the baseline solution and the median change run to 0.15% in 1980.

It is, however, quite likely that the government would use fiscal and monetary policy to keep real GNP and the unemployment rate at the level which would have occurred in the absence of the additional pollution control costs. In that case the price level would continue to rise above the baseline solution throughout the simulation period. Since much of the fiscal and monetary expansion would end up as price increases rather than volume increases, the stimulus would have to be substantial. A more detailed discussion of these results is given next.

Principal Results

The effects on pollution control costs on the key economic policy variables are given in Table II. They can be summarized briefly as follows:

A. Without Government Offset

1. By 1976, the wholesale price index will be 2.9% higher, the implicit GNP deflator will be 1.7%, and the consumer price index will be 1.2% higher. After that, lower levels of capacity utilization and higher levels of unemployment lead to a slower rate of price increase, so that by 1980 the differentials are 2.8%, 0.9%, and 0.0% respectively.

2. Constant-dollar GNP is $ 13 billion lower in 1976 but rises to only $ 8 billion less in 1980. The unemployment rate reaches a maximum differential of 0.18%, which narrows to 0.15% in 1980.

3. The net foreign balance declines an additional $ 1.9 billion in 1975 (when the maximum disturbance occurs), but the differential narrows to $ 0.2 billion by 1980.

4. In spite of the additional expenditures for pollution control investment, fixed business investment in constant dollars is $ 0.1 billion lower in 1976 and $ 1.2 billion lower in 1980. Higher capital goods prices, a lower rate of return, and the decline in output all contribute to this decline.

5. Housing starts, which usually are hit hardest by the increase in demand for funds elsewhere in the economy, decline by 0.09 million units in 1976 but are 0.03 million units higher in 1980.

The results, however, are much different if the government maintains the baseline level of output and employment, as is shown next.

B. With Government Offset

1. By 1976, the wholesale price index will be 2.9% higher, the implicit

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GNP deflator will be 1.8% higher, and the consumer price index will be 1.5% higher. These increases will continue, as higher levels of prices coupled with the same level of unemployment lead to larger wages, so that by 1980 the differentials are 3.7%, 2.6%, and 2.4% respectively.

2. Constant-dollar GNP and the rate of unemployment are assumed to stay at the baseline levels.

3. The net foreign balance is $ 2.2 billion lower in 1976 and $ 2.8 billion lower by 1980.

4. Fixed business investment in constant dollars is higher by $ 1.5 billion in 1976, as the added stimuli of increased pollution control expenditures and easier money more than balance the higher prices and lower rate of return. However, in the latter half of the decade the continued rise in prices, plus the lack of any substantial incremental investment for pollution control, finally leads to a lower level of - $ 0.2 billion.

5. Housing starts are 0.14 million lower in both 1976 and 1980.

The increases in Federal purchases of goods and services, state and local government purchases, transfer payments, and unborrowed reserves (the chief monetary policy variable in the model) are given in Table III. Since we are specifically pointing an expansionary policy, it is assumed that both Federal and state and local government spending are financed through increased deficits with no additional taxes and no tightening in monetary policy.

Table II

Effects on Selected Macroeconomic Variables for Median Change in Pollution Control Costs

With and Without Government Offset

	1972	1973	1974	1975	1976	1977	1978	1979	1980
Gross National Product, current dollars									
Baseline projection	1147.7	1267.4	1374.9	1480.3	1611.9	1747.3	1886.0	2033.0	2187.2
With pollution control costs	1151.8	1271.5	1381.6	1487.4	1616.0	1751.1	1891.6	2038.2	2190.4
Difference	4.1	4.1	6.7	7.1	4.1	3.8	5.6	5.2	3.2
With offsetting government policy	1151.8	1271.5	1385.7	1502.8	1641.5	1782.7	1926.2	2080.0	2245.4
Difference (from baseline)	4.1	4.1	10.8	22.5	29.6	35.4	40.2	47.0	58.2
Gross National Product, constant dollars									
Baseline projection	786.4	836.6	875.7	907.8	954.3	997.3	1038.8	1083.6	1131.5
With pollution control costs	788.4	835.7	872.4	899.4	941.2	984.8	1029.0	1075.0	1123.2
Difference	2.0	-0.9	-3.3	-8.4	-13.1	-12.5	-9.8	-8.6	-8.3
With offsetting government policy	788.4	835.7	874.6	907.8	954.1	997.6	1038.6	1083.2	1131.7
Difference (from baseline)	(not calculated)								
Implicit GNP Deflator, 1958=100.0									
Baseline projection	145.9	151.5	157.0	163.0	168.9	175.2	181.5	187.6	193.3
With pollution control costs	146.1	152.1	158.4	165.4	171.7	177.8	183.8	189.6	195.0
Difference	0.2	0.6	1.4	2.4	2.8	2.6	2.3	2.0	1.7
With offsetting government policy	146.1	152.1	158.4	165.5	172.0	178.7	185.4	192.0	198.4
Difference (from baseline)	0.2	0.6	1.4	2.5	3.1	3.5	3.9	4.4	5.1
Consumer Price Index, 1967=100.0									
Baseline projection	124.8	129.9	135.6	141.7	147.4	153.5	159.6	165.3	170.6
With pollution control costs	125.0	130.6	137.0	143.6	149.2	154.8	160.4	165.7	170.6
Difference	0.2	0.7	1.4	1.9	1.8	1.3	0.8	0.4	0.0
With offsetting government policy	125.0	130.6	137.0	143.7	149.6	155.9	162.4	168.6	174.7
Difference (from baseline)	0.2	0.7	1.4	2.0	2.2	2.4	2.8	3.3	4.1
Wholesale Price Index, 1967=100.0									
Baseline projection	116.1	117.9	119.8	122.3	124.5	126.5	128.3	129.5	130.4
With pollution control costs	116.3	118.7	121.5	125.3	128.1	130.1	131.8	133.1	134.0
Difference	0.2	0.8	1.7	3.0	3.6	3.6	3.5	3.6	3.6
With offsetting government policy	116.3	118.7	121.5	125.3	128.2	130.4	132.4	134.0	135.3
Difference (from baseline)	0.2	0.8	1.7	3.0	3.7	3.9	4.1	4.5	4.9
Net Foreign Balance									
Baseline projection	3.5	3.5	1.6	1.0	0.2	-1.1	-1.1	0.7	3.3
With pollution control costs	2.9	2.7	0.1	-.9	-.8	-1.3	-1.2	.6	3.1
Difference	-.6	-.8	-1.5	-1.9	-1.0	-0.2	-0.1	-0.1	-0.2
With offsetting government policy	2.9	2.7	0.1	-1.3	-2.0	-3.4	-3.4	-1.8	0.5
Difference (from baseline)	-.6	-.8	-1.5	-2.3	-2.2	-2.3	-2.3	-2.5	-2.8

Table II (Cont'd)

	1972	1973	1974	1975	1976	1977	1978	1979	1980
Unemployment Rate, percent									
Baseline projection	5.41	4.93	4.70	4.73	4.38	4.37	4.44	4.44	4.47
With pollution control costs	5.39	4.99	4.81	4.90	4.52	4.55	4.61	4.59	4.62
Difference	.02	.06	.11	.17	.14	.18	.17	.15	.15
With offsetting government policy	5.39	4.99	4.79	4.81	4.38	4.40	4.48	4.43	4.45
Difference (from baseline)	(not calculated)								
Fixed Business Investment, constant dollars									
Baseline projection	83.6	93.0	101.4	105.7	112.4	118.3	123.3	129.2	135.1
With pollution control costs	85.4	95.0	104.5	108.5	112.3	116.5	121.5	127.7	133.9
Difference	1.8	2.0	3.1	2.8	-0.1	-1.8	-1.8	-1.5	-1.2
With offsetting government policy	85.4	95.0	104.6	109.6	113.9	118.2	122.6	128.8	134.9
Difference (from baseline)	1.8	2.0	3.2	3.9	1.5	-0.1	-0.7	-0.4	-0.2
Housing Starts, millions									
Baseline projection	2.09	1.95	1.71	1.76	1.87	1.99	2.12	2.21	2.35
With pollution control costs	2.07	1.88	1.59	1.63	1.78	1.99	2.18	2.28	2.38
Difference	-.02	-.07	-.12	-.13	-.09	.00	.06	.07	.03
With offsetting government policy	2.07	1.88	1.59	1.61	1.72	1.91	2.06	2.12	2.21
Difference (from baseline)	-.02	-.07	-.12	-.15	-.15	-.08	-.06	-.09	-.14
Percentage Growth Rate of GNP, constant dollars									
Baseline projection	5.98	6.38	4.68	3.67	5.12	4.51	4.16	4.31	4.42
With pollution control costs	6.25	6.00	4.38	3.10	4.64	4.63	4.49	4.46	4.48
Difference	.27	-.38	-.30	-.57	-.48	.12	.33	.15	.06
With offsetting government policy	6.25	6.00	4.64	3.80	5.10	4.56	4.11	4.29	4.48
Difference (from baseline)	(not calculated)								
Percentage Growth Rate of Consumer Price Index									
Baseline projection	2.97	4.13	4.39	4.48	3.98	4.17	3.96	3.56	3.21
With pollution control costs	3.17	4.47	4.88	4.83	3.87	3.80	3.61	3.29	2.99
Difference	.20	.34	.49	.35	-.11	-.37	-.35	-.27	-.22
With offsetting government policy	3.17	4.47	4.87	4.88	4.10	4.27	4.16	3.83	3.57
Difference (from baseline)	.20	.34	.48	.40	.12	.10	.20	.27	.36

N.B. The "difference" for constant-dollar GNP and the unemployment rate has not been calculated for the simulation with offsetting government policy, since that run was designed to duplicate the baseline projection for those two variables.

Table III

	1972	1973	1974	1975	1976	1977	1978	1979	1980
Unborrowed Reserves									
Baseline	33.3	35.7	39.2	43.3	47.3	51.6	56.0	60.5	64.8
Offset	33.3	35.7	39.2	43.2	47.4	51.9	56.7	61.5	66.3
Government Employment									
Baseline	13.18	13.55	14.02	14.62	15.22	16.00	16.68	17.40	18.20
Offset	18.18	13.55	14.05	14.71	15.32	16.10	16.78	17.50	18.30
Federal Government Non-Defense Purchases of Goods and Services									
Baseline	26.1	29.9	33.1	35.9	38.7	41.5	45.1	49.9	55.0
Offset	26.1	29.9	33.1	35.9	38.7	42.2	46.9	52.2	57.8
State and Local Government Purchases									
Baseline	150.2	166.2	183.1	202.6	223.7	246.9	272.1	301.0	332.2
Offset	150.2	166.2	186.4	210.1	231.7	254.9	279.9	309.0	342.2
Other Federal Transfer Payments									
Baseline	21.5	28.8	33.0	35.5	39.5	43.5	47.5	54.0	62.0
Offset	21.5	28.8	34.5	41.8	52.0	54.8	58.5	65.0	73.0

All figures are in billion of current dollars except government employment, in millions.

As can be seen, the monetary and fiscal stimulus needed to return the economy to the baseline solution is substantial. We have raised Federal government purchases of goods and services by $ 3 billion, Federal transfer payments by $ 11 billion, and state and local government purchases by $ 10 billion. We have also raised civilian government employment by 100,000. In the area of monetary policy we have raised unborrowed reserves by $ 1.5 billion, which is sufficient to keep free reserves, interest rates, and credit rationing at approximately their baseline levels. While there are other fiscal policy mixes which could have been chosen, this particular set of changes seemed to contain realistic magnitudes and also minimized the distortion in the components of GNP relative to the baseline calculations.

One of the most interesting, although potentially confusing, aspects of these simulations is the way in which a rise in unemployment leads to lower prices and hence to a partial resurgence of output and employment. In order to comprehend this, it is necessary to understand the mechanisms by which a rise in prices decreases real output (and vice versa). This occurs through several distinct channels:

a. A higher rate of inflation, cet. par. raises the personal savings rate.

b. Higher rates of inflation lead to higher interest rates and tighter credit rationing, thus reducing investment.

c. Higher prices lead to less investment because of the increased cost, particularly in housing.

d. Higher prices lead to a worsening of the net export position.

e. Higher prices lead to a lower constant dollar government spending for the same current dollar figure. If the current dollar figure is raised, there are still some offsetting effects through an increase in taxation or

higher interest rates due to a larger budget deposit -- unless, of course, the Federal Reserve System expands the money supply at the same time. In addition, as previously discussed, the user cost of capital has been raised by the percentage increase in the supply price of capital goods.

These negative effects are partially offset by the increase in investment due to the pollution control standards. However, it is clear from the accompanying tables that this effect is far smaller than the price effects if in fact the economy is at full employment.

In addition there are several important secondary effects. A decline in real GNP increases unemployment, which in turn lowers wage increases and unit labor costs. In addition, the lower level of capacity utilization leads to lower mark-up factors. When these events begin to increase in importance, the previous price increases diminish and then the decline in real GNP due to these price increases also slackens. Thus prices and real GNP tend to return toward the level which would have occured if the pollution control costs had not been added. Since we are assuming that the economy is near full employment, it should not be surprising to see prices return to their former level. However, we would not expect a full recovery in output or employment, since by introducing non-productive investment we have retarded the rate of productivity growth - at least as traditionally measured - and hence have reduced the increase in real wages.

Because of this, it is important to consider the offset simulations, where we introduce fiscal and monetary policies which keep real GNP and employment at the same level which we have in the baseline solution. In order to do this, of course, prices rise substantially more and investment in constant dollars declines. This exercise points out one of the most

important findings of the report, namely that the additional burdens of pollution control standards while maintaining the economy at full employment will cause significant additional inflation over the decade.

It is also interesting to note that the major differences in the price patterns between the median change and the offset runs during the 1976-1980 period occur for service prices rather than goods prices. The change in the wholesale price index, which is determined in large part by raw material input prices and capacity utilization, differs very little between these two simulations. On the other hand, service prices, which depend almost entirely on labor costs, decline substantially as higher unemployment leads to smaller increases in wage rates. Thus the consumer price index is much more affected by changes in the unemployment rate, and hence unit labor costs, than is the wholesale price index or the implicit GNP deflator.

It should be stressed in any case that the baseline case was constructed specifically to keep the economy near full employment. The Phillips curve, or tradeoff between inflation and unemployment, is highly nonlinear in this region, and substantial changes in price - either up or down - are required to produce relatively small changes in output and employment. The exact political tradeoff between inflation and unemployment may be determined differently by different individuals or administrations, but in any case the functional form of this tradeoff in the region of 4½% unemployment should be made explicit.

One of the most striking results of these simulations is the amount which the net foreign balance deteriorates in the government offset simulations. Yet this should not really be much of a surprise. An increase in domestic prices for the same level of real output is bound to increase imports and decrease

exports in constant dollars if not in current dollars as well. We have estimated the price elasticities for imports of finished goods to be approximately -1.5 and for other imports to be -0.9. Thus an increase of approximately 2½% in the overall price index should raise imports of goods approximately 3% by 1980.*

There are, of course, several counter measures which could be taken to reduce this trade deficit, some of which are discussed in the conclusion. For example, a 3% rise in foreign prices relative to domestic prices would eliminate any deterioration in the net foreign balance due to pollution control standards, and there are several different ways to accomplish this. In any case we do point out that a decline of $ 2 to $ 3 billion in the net foreign balance clearly is consistent with a price level which is 3% higher by the end of the decade.

We might briefly mention the effects of two other variables of interest and importance: the Federal government budget and the corporate bond rate. We have not included these variables in Table II because they are almost totally dependent on the choice of exogenous policy instruments which are used in the government offset calculations. We have, for example, chosen a monetary policy which basically keeps interest rates at the baseline levels. With respect to the government budget, it might be noted that although we have increased Federal government spending by $ 14 billion, the surplus declines only $ 5½ billion. The difference is made up by increased taxes resulting from the higher nominal value of personal and corporate incomes.

Although we do not discuss the other runs in this summary, it may be of interest to examine briefly the results which would occur for the 150% of median change run. Under this maximum reasonable assumption, we would find

the following (the numbers in parantheses refer to the analogous results for the 100% run).

1. By 1976, the wholesale price index will be 4.5% (2.9%) higher, the implicit GNP deflator will be 2.8% (1.8%) higher, and the consumer price index will be 2.4% (1.5%) higher. By 1980 the differentials become 5.6% (3.7%), 4.0% (2.6%), and 3.8% (2.4%) respectively.

2. The net foreign balance is $ 3.4 ($2.2) billion lower in 1976 and $ 4.5 ($2.8) billion lower by 1980.

3. Fixed business investment in constant dollars is $2.6 ($1.5) billion higher in 1976, but $0.1 ($0.2) billion lower in 1980.

4. Housing starts are 0.27 (0.14) million lower in 1976 and 0.26 (0.14) million lower in 1980.

In addition, the Federal government surplus, which had only declined from $ 7.7 billion to $ 2.2 billion in the 100% offset run, now registers - $ 3.7 billion.

It can be seen that there are important nonlinearities in the model as the amount of fiscal stimulus increases. Prices rise more than 1.5 times the median change simulation, and the net foreign balance declines more than 1.5 times as much. Fixed business investment rises proportionately less and housing starts are relatively much harder hit. Thus if pollution control costs are 150% of the median estimates used in this study and steps are taken to offset the rise in enemployment but not in prices, prices could be as much as 4% higher above the baseline solution and the net foreign balance could be as much as $ 4.5 billion lower by 1980.

Chase Econometrics

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Chase Econometrics

I. The Chase Econometrics Macroeconomic Model and Inter-Industry Forecasting System

A. General Structure of the System

Both the baseline projections of the economy through 1980 and the final numerical estimates of the economic impacts resulting from compliance with existing pollution control standards will be based in large part on the Chase Econometrics Macroeconomic Model and Inter-Industry Forecasting System. As a glance at the diagram in Figure I will show, the forecasting system is composed of three parts: (1) A long range macroeconomic forecasting model which generates estimates of over four hundred macroeconomic variables, including nearly forty separate components of aggregate demand; (2) An updated version of the 1963 OBE Input/Output Table, which, when "driven" by our estimates of aggregate demand, yields estimates of shipments for each of over eighty industries; (3) Regression models for each of the 80 industries which, depending on the availability of supporting data, yield estimates of up to fifteen variables such as profits and employment for each of the industries. In addition the system contains additional subroutines which enable the user to enter changes in costs at the industry level and then trace the effect of these changes on the rest of the system by generating new forecasts for industry prices, industry demand, and aggregate demand. In terms of the diagram shown in Figure I, the user can in a sense solve the system "backward" by going from bottom to top.

All projections of macroeconomic variables will be based on runs of the Macroeconomic Model mentioned above. The Model as it is used here is designed to predict on an annual basis ten years into the future; it is, however, the same model in all important regards as the one CEAI uses to forecast short term (quarterly) fluctuations in economic activity. As such the Model meets various long run homogeneity conditions such as the constancy of the personal savings rate and the constancy of the capital-output ratio, while at the same time placing great emphasis on variables such as capacity utilization and inventory investment which are required for accurate quarterly forecasting. The Model is unique in that it is fully simultaneous and thus stresses the interrelationships between the real, monetary, and price sectors. Thus when a policy variable or other autonomous factor is altered, the effects are felt throughout the entire model as they could occur in the economy. For example, the institution of an investment tax credit will in the course of stimulating fixed business investment make credit more difficult to obtain for the housing sector, thus causing a slowdown in housing starts. This effect is particularly noticeable near full employment, and in extreme circumstances ex ante increases in aggregate demand may result in no rise in constant-dollar GNP.

The Macro Model forecasts over forty components of aggregate demand. These include purchases of new cars, used cars, tires and parts, mobile homes, furniture, major household appliances, other consumer durables, food and beverages, clothing, other consumer nondurables, housing services, transportation services, and other services. In the investment sector the model forecasts purchases of equipment, commercial construction, industrial

construction, other private nonresidential construction, manufacturing investment, nonmanufacturing investment, single-family housing starts, multi-family housing starts, additions and alterations to housing, and inventory investment. Equations are provided for both imports and exports of food, crude materials, semi-finished manufactures, finished goods, and services. A number of government spending categories are also predicted on an exogenous basis. The forecasts are made in both current and constant dollars. With respect to this study it is particularly important that we have sufficient detail in the components of aggregate demand, for otherwise most of the industry detail will be lost in the bridge equations between final and aggregate demand.

While it would be superfluous to give a complete list of the variables in the Macro Model, it might be mentioned that it contains over 120 stochastic equations, nearly 100 identities, and 100 exogenous variables. Besides the aggregate demand components listed above, the model has a 20-equation monetary sector and several tax and transfer functions. On the supply side, we have developed a new measure of capacity utilization, which takes into account all factors of production instead of only labor or capital. This new measure has been particularly useful in determining price movements near maximum capacity. We have also improved the measure of "hidden unemployment", i.e., the number of workers who would take a job if it were readily available, but are not currently counted in the labor force. Changes in wage rates are a function not only of previous changes in prices and the measured unemployment rate, but of the hidden unemployment rate as well. This latter variable has been most useful in explaining recent

large wage changes during the past three years. Behavior of the model near full employment, which is critical to an understanding of the results in this study, is substantially influenced and improved by our new measures of capacity utilization and hidden unemployment.

From the estimates of aggregate demand which were listed below, we have estimated regression equations which link the components of aggregate demand with those of final demand -- an industry's contribution to GNP -- for each of the 80 industries enumerated in the 1963 input/output table. This set of 80 regression equations is known as a "bridge matrix". Later in the study, when we retranslate industry demand back to aggregate demand, we use the inverse of these equations in what we have termed a "reverse bridge matrix".

The equations in the bridge matrix, for example, would involve combining personal expenditures for apparel with that portion of government defense expenditures going to clothe the armed forces plus exports of apparel to arrive at final demand for the apparel industry. Airline expenditures for stewardesses' uniforms are not counted since they contribute to personal consumption of transportation services which in turn contribute to final demand for the air transportation industry. Many of the bridge equations, such as the one linking clothing and the apparel industry, are almost a one-to-one basis. Others, such as the relationship for engines, computers, ball bearings, or electronics all come from a common base of producers durable equipment plus exports of finished goods, although the cyclical and secular patterns of each of these regressions are quite different.

SCHEMATIC REPRESENTATION OF

CHASE ECONOMETRICS INDUSTRY FORECASTING SYSTEM

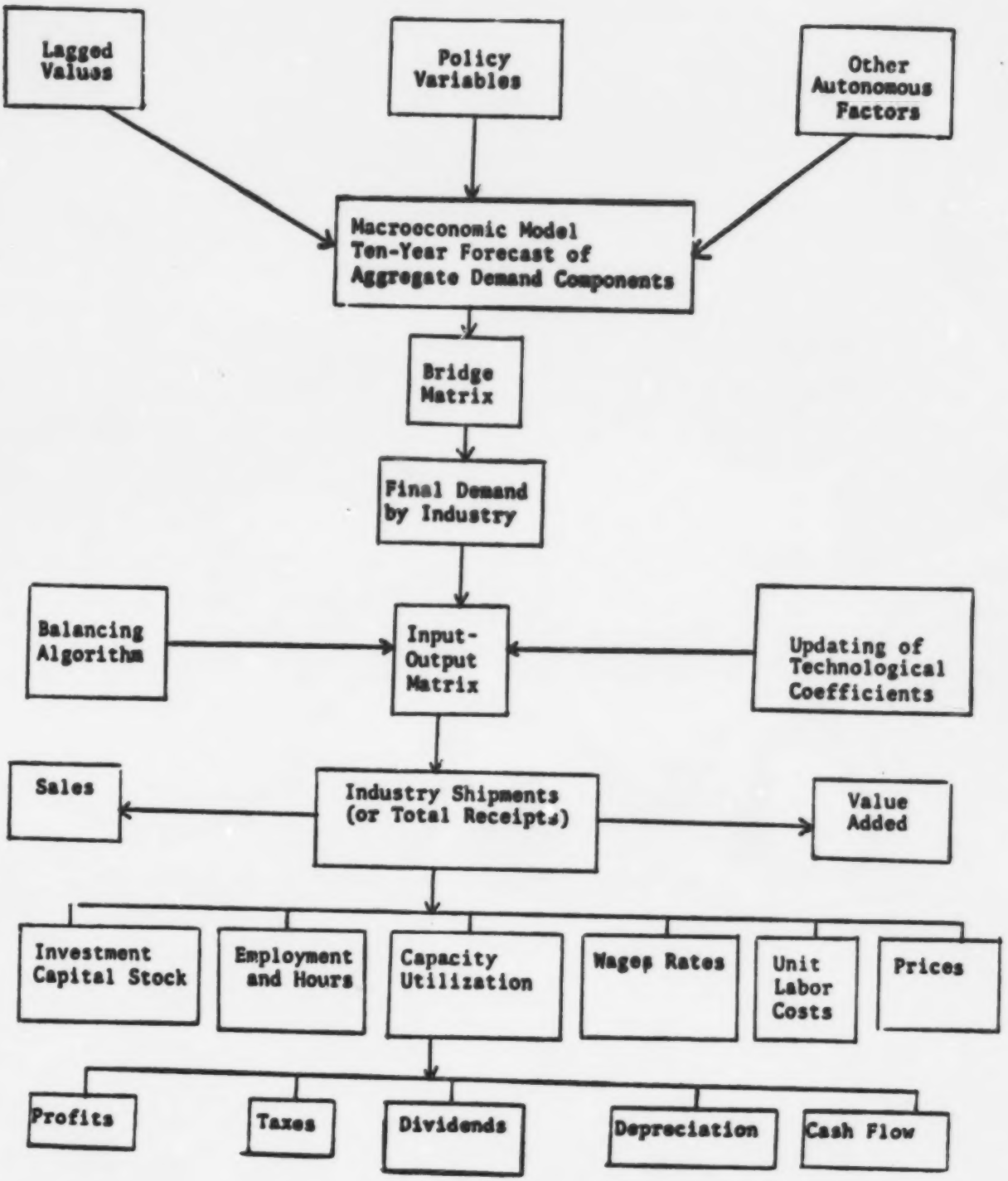

Figure 1

These final demand projections are combined with the input/output table to generate industry shipments for each of the 80 industries. The I/O table shows the interrelationship between an industry's output and the inputs required, both directly and indirectly, from all other industries. The proportions of inputs purchased directly from each of the other 79 industries are calculated for all industries. In addition the indirect requirements involved in these chains of demand are also calculated. While it may be true that the air transportation industry has a negligible direct requirement for lumber products, it does have a direct requirement for paper products, such as tickets, magazines, or food packaging. When these supplying industries increase their outputs in response to the air industry's increased demand for their inputs, they will then increase their direct requirements upon the lumber industry. To the extent that this occurs air transportation is "credited" with an indirect requirement for lumber product.

The CEAI staff has developed and employs algorithms which enable them to update in a systematic manner the 6400 coefficients - direct and indirect requirements - of the I/O table from 1963 to the present and on through to 1980. In addition the capability exists of changing any number of these coefficients to simulate the effects of changing methods of production without violating the internal consistency of the system.

After shipments have been determined, the remaining variables for each industry are predicted using multiple regression analysis. Annual equations are estimated using shipments or value added, other endogenously generated variables within the industry subsystem, and macroeconomic variables as the independent arguments. Since these functions are estimated on an

annual basis and are used for long-range projections, they give less importance to short-run fluctuations, such as bottlenecks in delivering producer durables and lags between changes in unit labor costs and prices, inasmuch as the divergencies cancel out over the course of a year. If on the other hand these phenomena are also reflected in yearly data they would be included in these functions.

The general schematic representation of the regression equations for a typical industry is as follows:

Investment	= f (	output originating	;	financial variables	;	capital stock)
		↑		↑		↑
		as generated by I/O		macroeconomic variables		calculated from past investment

Having generated figures for capital stock we can then estimate the labor requirements - production function:

Employment	= f (	output originating	;	capital stock	;	technological trends)

We can now estimate capacity utilization from our predictions of employment and capital stock. We then explain wage rates, which can in turn be used to explain prices. The functions are of the form:

Wage Rates	= f (	aggregate wage rates	;	aggregate unemployment	;	relative changes in output prices and profits)
Price	= f (	unit labor costs	;	capacity utilization	;	raw material costs)

We now have generated enough industry information to predict profits, using the following type of equation:

Profits = f (output, prices, unit labor costs, capacity utilization)

In order to calculate cash flow we add equations for corporate income taxes (a function of profits and tax laws), dividends (a function of aftertax profits) and depreciation (a function of present and past investment and tax laws).

B. Dynamics of the Macroeconomic Model

As suggested in the previous section, the Chase Econometrics Macro Model is a very complex and fully simultaneous model with many asymmetries and nonlinearities. These properties of the Model become relatively more important as the economy nears full employment. Thus before examining the actual results of the simulations, it may be of interest to explore some of the more important dynamic features of the model.

It is clear that the major exogenous disturbance which is entered into the Model in this study is the increase in costs stemming from the investment necessary to comply with existing pollution control standards. Thus it is of primary importance to understand how the economy reacts to an increase in prices when it is near full employment. A rise in prices will decrease real output (and vice versa) through several distinct channels:

a. A higher rate of inflation, cet. par., raises the personal savings rate.

b. Higher rates of inflation lead to higher interest rates and tighter credit rationing, thus reducing investment.

c. Higher prices lead to less investment because of the increased cost, particularly in housing.

d. Higher prices lead to a worsening of the net export position.

e. Higher prices lead to a lower constant dollar government spending for the same current dollar figure. If the current dollar figure is raised, there are still some offsetting effects through an increase in taxation or higher interest rates due to a larger budget deposit -- unless, of course, the Federal Reserve System expands the money supply at the same time.

We now discuss each of these in more detail.

The positive relationship between the savings rate and the rate of inflation is one of the most misunderstood in all of economic literature. Occasional empirical attempts to determine whether this relationship does in fact exist have too often been restricted to a set of simple relationships ir which consumption (or savings) is regressed against income and prices. Such overly simplistic experiments usually give statistical results which are not significant enough to support either point of view. Even if they did, however, they would miss the real question by a wide margin. For the answer, even on a theoretical level, depends on the type of inflation which one specifies.

Neutral inflation occurs when all product and factor prices rise by the same amount. An extreme case of such an inflation (or delfation) occurs when a country simply alters its unit of exchange, such as the conversion of 100 old francs to 1 new franc. Under such conditions the savings rate is completely unaffected. This is well known as the homogeneity condition for consumption. However, it is clear that we

are not considering this type of inflation for the purposes of the U.S. economy in the 1970's.

Hyperinflation occurs when the expected rate of inflation next period is greater than the actual rate of inflation in this period. When this happens, consumers rush to change their money for goods as quickly as possible. During such times, the ex ante savings rate goes to zero. Clearly this is not the type of situation which is of interest in the present project.

Normal inflation occurs when neither of the two above conditions holds. Therefore, some prices are rising faster than others but they are expected to rise less rapidly next period. Even within the broad group of normal inflation we can distinguish several sub-varieties. However, it will be sufficient to deal in this context with the actual type of inflation witnessed in the U.S. economy during the postwar period, which in every case has been sparked by excess demand, at least in its initial phases.

During the type of inflation which we have been witnessing, two major shifts take place. First of all,prices of goods and services with high income elasticities rise relatively faster than those with low income elasticities, although they still rise more slowly in absolute terms. This can best be clarified with an example. Assume that during a year of low inflation, consumer prices rose 2%, with durable goods rising 0% and services rising 4%. In a year of high inflation (say 5%) it is likely that durables prices would rise 4% and service prices 6%. While durables prices are still rising at a somewhat lower rate than service prices, the incremental rate of change has been greater. Thus there is a relative decline in durable

purchases (which are assumed to have a high short-term income elasticity) which is not balanced by the slightly higher spending on services (which have a low short-term income elasticity). This argument is strictly supportable on a theoretical basis only if the goods with high income elasticities also have high price elasticities, and analogously for low elasticities, but this seems eminently reasonable. In any case the argument is easily supportable on an empirical basis.

This, however, is not the most important link by which a rise in the rate of inflation increases the savings rate. Accordingly to the permanent income hypothesis, the marginal propensity to consume is lower for variable incomes than it is for fixed incomes. Yet it is almost a truism that inflation penalizes those on fixed incomes at the expense of those on variable incomes. Thus during inflation the decline in consumption by those on fixed incomes is not nearly matched by the increase in consumption by those on variable incomes -- even if we assume that the income changes are the same -- and thus the savings rate rises. This result, which has long been supported by careful theoretical analysis, has never before been shown to operate empirically, mainly because the critical parameter estimates for income distribution and relative price terms can be uncovered only at a fairly detailed level of disaggregation. While other studies have divided consumption into many more categories than are predicted in the Chase Econometrics model, they have all been aimed at determining long-run trends and have excluded short-run cyclical effects due to inflation.

The other channels by which a rise in prices lowers real output are much more straightforward and do not require nearly as much detailed

exposition. For a given nominal money supply, it is clear that higher prices lead to a lower real money supply and hence an increase in interest rates unless there has been a specific offsetting shift in the liquidity preference function. In addition, the investment functions in the Model for both residential and nonresidential investment contain relative price terms. Hence when the cost of capital goods rises more than the general price level for goods -- which invariably happens during booms because of the relatively inelastic supply curve for all types of construction -- the constant-dollar demand for fixed investment at a given level of output is decreased. This effect is considerably stronger for residential construction than other types of investment, since the home is being sold (or rented) directly to the final consumer, who has a more elastic demand curve than the businessman who is renting industrial or commercial space. The relative price effect on equipment, while still significant, is smaller than it is for either type of construction.

It should come as no surprise that an increase in domestic prices for a given level of foreign prices leads to a deterioration in the net foreign balance. We have found that the price elasticity for both imports and exports of finished goods is greater than unity, thus making the problem one of a potentially serious nature. Finally it should be pointed out that a government budget which is fixed in current dollars will clearly buy less goods and services and generate less employment if prices increase. It is true that governments faced with this dilemma often raise their current-dollar expenditures enough so that real purchases remain constant. For a given nominal money supply, however, this will result in higher interest rates

and tighter credit, thus reducing aggregate demand in the private sector. Only if the Federal Reserve System agrees to follow a "neutral" or passive monetary policy and create as much additional money as is necessary will there be no initial rise in interest rates. Yet if the economy is at full employment, this move is eventually the most inflationary of all, since it increases the ex ante demand for resources without changing the supply, and thus will eventually result in higher inflation than would be the case if the Fed did not finance the deficit.

It is clear, then, that a rise in costs and prices will reduce aggregate demand and raise unemployment. As soon as this happens, however, secondary effects which act in the opposite direction will begin to surface. A rise in unemployment, both measured and "hidden", will result in a lower level of wage increases in the following year. For a given level of productivity advance, this means that unit labor costs and prices will not rise as much. In addition, the lower level of capacity utilization leads to lower mark-up factors for prices. When these events begin to increase in importance, the previous price increases begin to diminish. The decline in real GNP and employment, which was originally caused by higher prices, also begins to slacken. As this continues, prices and real GNP tend to return toward the level which would have occurred if the additional costs had not been added. If we assume that the economy is near full employment, it is likely that prices may return to their former level. However, in the specific case of pollution control investment, we would not expect a full recovery in output or employment, since by introducing non-productive investment (in the sense that it does not add to output) we have retarded the rate

of productivity increase - at least as traditionally measured - and hence have reduced the increase in the real wage. There are those who would argue that the abatement of pollution emissions represents a substantial step forward and hence should somehow be reflected in an increased GNP. While this argument does indeed have some merit, it is not the purpose of this study to redefine the national income accounting system.

It should also be noted that while the major increase in prices due to the pollution control costs occurs in the goods sector, the major decline in price increases due to higher unemployment occurs in the services sector. The change in the wholesale price index, which is determined in large part by raw material input prices and capacity utilization, shows very little relative decline when unemployment increases. On the other hand, service prices, which depend almost entirely on labor costs, decline substantially as higher unemployment leads to smaller increases in wage rates. Thus the consumer price index is much more affected by changes in the unemployment rate than is the wholesale price index or even the implicit GNP deflator.

The basic simulations for this report were prepared under the assumption that the economy would return to full employment by the mid-1970's. The Phillips curve, or tradeoff between inflation and unemployment, is highly nonlinear in this region. Thus substantial changes in prices -- either up or down -- are required to produce relatively small changes in output and employment. In the simulations where fiscal and monetary policy are used to return the economy to the level of employment and real output which would have occurred in the absence of pollution control costs, substantial increases in unborrowed reserves (the principal monetary policy variable) and government

spending are needed to produce relatively modest changes in employment and output, since the majority of the change is reflected in higher prices. On the other hand, the recession simulations, which are constructed as an alternative, show that much less fiscal and monetary stimulus is necessary to return the economy to its previous position.

It was mentioned earlier that the Model is highly nonlinear. Thus the simulations where pollution control costs are estimated to be 75%, 125%, and 150% of the median change are of more than passing interest. In particular, the cost increase of 150% of the median value causes changes in some of the key macroeconomic variables which are as much as 200% of the median value changes, and require much more than proportional offsets in the form of fiscal and monetary policy. It is not feasable to include a complete list of the nonlinearities of the Model, since they appear in almost every equation. However, the most important ones are found in the wage and price sector, where wages are a nonlinear function of hidden unemployment and prices are a nonlinear function of capacity utilization. We have mentioned earlier how these two terms are quite important in formulating the basic characteristics of the model; this becomes even more true when we consider proportionately larger deviations around a baseline full employment value.

II. Methodology of Adjusting Macroeconomic Model Variables To Reflect Cost Increases Due to Anti-Pollution Requirements

In this study we have combined the Chase Econometrics Macroeconomic Model and Inter-Industry Forecasting System to estimate the effects which cost increases in certain specified industries will have on the overall economy. Of primary interest are the effects on prices, output, employment, and foreign trade. Since this procedure is fairly complex, we outline the major steps first and then discuss each one in greater detail.

1. Calculate the percentage cost increase faced by each major polluting industry. In doing this, we use the numbers supplied by the EPA on the actual cost increases for the industries with largest pollution control costs. These figures, available on a year-by-year basis, include both capital costs (on an annualized basis) and operating expenses. They were made available for fifteen industries in which pollution control expenditures are expected to be significant.

2. Translate the percentage cost increases into percentage price increases. The "mark-up" factors, which represent the proportion of additional costs passed along as higher prices, have already been calculated on an industry-by-industry basis in the Chase Econometrics industry models. These mark-ups, as might be expected, all range from 0.8 to 1.0 in the manufacturing sector.

3. Calculate how these price increases will be spread to all industries. Thus far we have calculated only the direct effect of pollution controls on prices; that is, the amount that the price of steel (e.g.) rises because pollution control equipment is added in the steel industry. However, we must consider the effects which an increase in steel will have on machinery, autos, and other steel-

using industries. In other words, we must measure the indirect as well as the direct effects of the price increases in each industry.

The input/output table is particularly well suited for this, since it specifically measures both direct and indirect effects and combines them in a single table. We thus use the coefficients from the I/O table entitled "Total Requirements Per Dollar of Delivery to Final Demand". These coefficients are input weights, and thus the correct ones to use in determining the total increase in product prices caused by increases in input prices.

4. Convert the price increases by final demand categories to aggregate demand categories. We must use a reverse bridge matrix to go from the 80 categories of final demand to the approximately 40 categories of aggregate demand contained in the Chase Econometrics macromodel. For example, we must convert the price increase in the food industry to an increase in the consumer price index for food.

5. Translate the ex ante price increases at the aggregate demand level which we have just calculated into actual ex post price changes. Until this has been accomplished we do not yet know what changes in final product prices will be, since the cost increases may not be fully passed along. Thus we use the mark-up factors at the final demand level (consumption, investment, and exports) to determine what the initial price rise will be.

6. Calculate the equilibrium changes in prices and other variables by solving the complete macroeconomic model. The final price rises, after the dynamics of the system have come into play, are likely to be substantially different from the impact increases. First, higher prices will in general lead to lower output, which results in lower capacity utilization and hence a slight mark-up factor. In addition, lower output leads to higher unemployment, somewhat smaller wage

demands, and thus lower unit labor costs and prices. On the other hand, higher prices usually lead to greater wage demands, which in turn raise unit labor costs and prices. These two effects are, of course, offsetting, and there is no a priori way to determine which one will predominate in any given situation.

7. Adjust for changes in fixed business investment. We have so far discussed changes in the price terms only. Yet the cost and price increases are due to the increased investment required by the pollution control standards. We should adjust investment as well. Since more investment will be needed, the constant term in the investment function should be raised by this initial amount. However, more investment for a given level of monetary ease or stringency will result in somewhat higher interest rates and more stringent credit conditions, and hence will reduce other investment somewhat, although the offset will be felt more strongly in housing than in equipment.

Finally, the user cost of capital will rise somewhat. Since it will now take more investment to produce a given amount of output, the required rate of return on productive investment will have to increase to offset the zero return on non-productive investment. Some investment projects which otherwise could have been undertaken will be cancelled because of the increased expense, and so investment in constant dollars will decline somewhat.

It should be pointed out that ordinarily an increase in investment would lead to an increase in labor productivity and hence a decline in the labor/output ratio. However, since investment for pollution control purposes is not considered to be productive investment, there will be no such substitution effect between labor and capital. We have thus adjusted the model to reflect the fact that there is no net increase in the productive capital stock.

We now consider each of these steps in more detail.

1. Cost increases by individual industries.

Figures were supplied by EPA for projections of value added and annualized costs due to increased pollution control standards. The annualized costs include both capital costs - amortization and interest charges - and maintenance costs, expressed in 1971 dollars. The cost figures were the same ones as those used in the industry studies previously commissioned by EPA. The extrapolation of value added in constant prices was taken for the most part from studies already prepared by the Department of Commerce or the Environmental Protection Agency. For the utilities industry we supplied the long-term growth rate from the Chase Econometrics industry forecasts.

The complete lists of industries included, together with the annualized costs and proportion of value added, are given in Table II.1.

It will be noted that pollution control cost figures are given for only 15 industries. It is believed that this covers the great majority of pollution costs in the entire economy. However, it is implicitly assumed that there are no such costs associated with any other industries, which clearly biases the estimated change in prices downward by some unknown amount.

It should also be pointed out that these pollution control costs are taken as a percentage of value added, rather than of total shipments. This approach implies that pollution control costs will be passed along in such a way that previous profit margins will be maintained, subject to the modifying influence of mark-up factors below unity as given in Table II.2. This method seems much more reasonable than than the assumption that pollution control costs will be passed along on a dollar-for-dollar basis, thus implying a zero rate of return on marginal investment.

Table II.1

	Food and Kindred Products (I/O 14)		Textile Mill Products (I/O 16)		Lumber and Wood Products (I/O 20)		Paper and Products (I/O 24)		Chemicals & Products (I/O 27)	
	Change in annualized costs* (millions of 1971 $)	As a fraction of value added	Change in annualized costs* (millions of 1971 $)	As a fraction of value added	Change in annualized costs* (millions of 1971 $)	As a fraction of value added	Change in annualized costs* (millions of 1971 $)	As a fraction of value added	Change in annualized costs* (millions of 1971 $)	As a fraction of value added
1972	29.1	.08	7.2	.13	2.7	.04	32.4	.35	35.8	.27
1973	30.5	.08	7.8	.13	2.7	.04	35.8	.37	41.9	.30
1974	32.5	.08	8.4	.14	2.8	.04	48.5	.48	61.4	.42
1975	34.2	.08	8.5	.14	2.9	.04	51.8	.50	78.9	.52
1976	36.3	.09	9.3	.15	3.0	.04	39.2	.36	54.7	.34
1977	14.2	.03	4.1	.06	0.8	.01	15.9	.14	30.0	.18
1978	14.3	.03	4.0	.06	0.9	.01	16.1	.14	29.4	.17
1979	14.6	.03	4.2	.06	0.8	.01	16.0	.13	29.9	.16
1980	14.6	.03	4.4	.06	0.8	.01	16.3	.13	30.5	.16

	Plastics (I/O 28)		Petroleum Refining (I/O 31)		Leather (I/O 33)		Stone & Clay Prod. (I/O 36)		Primary Iron & Steel (I/O 37)	
1972	2.78	.05	12.9	.19	2.11	.59	8.05	.10	44.8	.26
1973	2.98	.04	19.0	.27	2.14	.58	10.42	.13	121.6	.70
1974	3.06	.04	50.3	.67	2.17	.57	20.97	.25	330.9	1.85
1975	3.21	.04	55.5	.71	2.17	.55	23.87	.27	373.3	2.03
1976	3.30	.04	29.9	.36	2.17	.54	11.24	.13	122.3	.65
1977	1.70	.02	10.3	.12	.37	.09	2.89	.03	24.2	.13
1978	1.60	.01	10.1	.11	.38	.09	2.99	.03	27.6	.14
1979	1.50	.01	10.2	.11	.38	.09	2.99	.03	27.7	.14
1980	1.60	.01	10.3	.10	.38	.08	2.99	.03	27.8	.13

	Primary Nonferrous Metals (I/O 38)		Motor Vehicles & Equip. (I/O 59)		Aircraft and Parts (I/O 60)		Elec.,Gas,Water & Sanitary Services (I/O 68)		Wholesale & Retail Trade (I/O 69)	
1972	30.8	.39	1.78[a]	.06[b]	.76	.01	123.0	.50	6.6	.00
1973	49.7	.61	1.81	1.44	.77	.01	274.7	1.03	6.6	.00
1974	142.9	1.69	1.92	1.39	.83	.01	430.7	1.53	25.3	.02
1975	161.4	1.84	2.04	4.36	.88	.01	483.2	1.65	28.7	.02
1976	60.2	.66	2.07	2.63	.88	.01	176.9	.57	12.3	.01
1977	18.4	.19	.87	.00	.37	.00	65.8	.20	1.5	.00
1978	18.5	.19	.88	.00	.37	.00	73.1	.20	1.5	.00
1979	18.7	.18	.88	.00	.38	.00	73.3	.19	1.5	.00
1980	18.7	.18	.88	.00	.38	.00	73.6	.18	1.5	.00

*Incremental cost over previous year

[a]Excluding mobile source emission control standards

[b]Including mobile source emission control standards

2. Translation of Cost Data to Price Data for Basic Industries

One of the major problems in any cost study of this type is the estimation of the proportion of cost increase which is reflected in increased prices. For this purpose we have used estimates of mark-ups which are taken from the Chase Econometrics industry models. In general these equations are of the form:

$$P_j = a_o + a_1 ULC_j + a_2 C_{P_j} + a_3 P_m + \ldots \qquad j = 1, \ldots, N$$

where P = prices

ULC = unit labor costs
C_P = capacity utilization
P_m = price of material input (usually raw materials or import prices)

While the exact specification of the price equation varies among industries, all of them follow the same general structure.

An increase in the cost of (e.g.) steel by X% will result in a price increase of αX%, where α is the mark-up factor. In the absence of any definite information to the contrary, we assume that the increase in price charged to all industries is the same. This is a very reasonable assumption except possibly for the particular industry itself, where the problem of transfer pricing arises. However, we are assuming that all transfer pricing is done using market rates, which is undoubtedly the most reasonable assumption in any case, so that this problem does not occur.

We then have the increase in price for the 15 industries for which pollution control costs are adjudged to be serious. The actual mark-up factors for all I/O categories in the manufacturing sector are given in Table II.2. In the absence of any definite information about the service industries, it was assumed that the mark-up was unity.

Table II.2

Markups for Industry Equations by Input/Output Category

I/O Category	Description	Markup Factor
13	Ordnance & Accessories	1.0
14	Food & Kindred Products	0.97
15	Tobacco Manufactures	0.97
16	Fabrics,Yarn,Thread Mills	0.90
17	Misc. Textiles & Floor Coverings	0.84
18	Apparel	0.84
19	Misc. Fabricated Textiles	0.84
20	Lumber Products Except Containers	0.84
21	Wooden Containers	1.0
22	Household Furniture	1.0
23	Other Furniture & Fixtures	0.81
24	Paper & Allied Products Except Containers	0.81
25	Paperboard Containers & Boxes	0.89
26	Printing & Publishing	1.0
27	Chemicals & Products	0.94
28	Plastics & Synthetic Materials	0.94
29	Drugs,Cleaning & Toilet Preparations	0.94
30	Paints & Allied Products	0.94
31	Petroleum Refining	0.94
32	Rubber & Misc. Plastics Products	
33	Leather Tanning & Industrial Leather Products	0.96
34	Footwear & Other Leather Products	0.96
35	Glass & Glass Products	0.92
36	Stone & Clay Products	0.92
37	Primary Iron & Steel Mfg.	0.87
38	Primary Nonferrous Metal Manufacturing	0.93
39	Metal Containers	0.86
40	Heating,Plumbing, & Structural Metal Products	0.86
41	Stampings,Screw Machine Products & Bolts	0.86
42	Other Fabricated Metal Products	0.86
43	Engines & Turbines	0.90
44	Farm Mchy. & Equipment	0.90
45	Construction,Mining,Oil Field Machinery	0.90
46	Materials Handling Mchy. & Equipment	0.90
47	Metalworking Machinery & Equipment	0.90
48	Special Industry Mchy. & Equipment	0.90
49	General Industrial Mchy. & Equipment	0.90
50	Machine Shop Products	0.90
51	Office,Computing,Accounting Machines	0.90
52	Service Industry Machines	0.90
53	Electrical Industrial Eqpt.	0.83
54	Household Appliances	0.83
55	Electric Lighting & Wiring Equipment	0.83
56	Radio,TV, & Communications Equipment	0.83
57	Electronic Components & Accessories	0.83
58	Misc. Electrical Mchy.	0.83
59	Motor Vehicles & Eqpt.	0.90
60	Aircraft & Parts	1.0
61	Other Transportation Eqpt.	1.0
62	Scientific & Controlling Instruments	1.0
63	Optical,Ophthalmic & Photographic Eqpt.	1.0
64	Miscellaneous Manufacturing	0.80

3. Allocating Price Increases to All Industries.

Thus far in the study we have answered the question "How much will the price of steel go up if the cost of steel goes up $1 ?" but we have not yet attempted to answer the question "How much will the price of cars go up if the price of steel goes up by $1 ?" Our next set of calculations deals with this question.

It is apparent that at least two types of information are needed. First, we must know the ratio of the cost of steel used in a car to the price of the automobile, and secondly, we must estimate the price mark-up factor for autos. The first point is easily met. We simply use the I/O coeffieients - including both direct and indirect effects - as they appear in the 1963 I/O matrix. The 1963 coefficients are somewhat out of date, which might hamper actual forecasts of output. However, using these coefficients merely as a weighting scheme will entail only a miniscule error.

Thus in order to calculate the percentage price changes in each I/O category due to both the direct and indirect effects of the additional costs of pollution control equipment, we simply multiply the coefficients in the total requirements matrix by the price vector calculated in step (2) above.

In matrix notation:

Let $\tilde{A}$ be the matrix of flows

(e.g. dollars of steel used in the auto industry)

A is then the matrix of direct requirements per dollar of gross output

(e.g. $\frac{\text{dollars of steel used in the auto industry}}{\text{total shipments of auto industry}}$)

The matrix of total requirements (direct and indirect) per dollar of delivery to final demand, which is the set of coefficients used here, is then given by

$(I-A)^{-1}$, where I is the identity matrix. Since A = direct effects

$$A^2 + A^3 + \ldots + A^N = \text{indirect effects}$$

and $\| A \| < 1$, then $A + \ldots + A^n = \frac{1}{I-A}$

by the usual summation criteria.

The change in final demand prices for each year for all 80 categories of the I/O table is then given by $(I-A)^{-1} \vec{\Delta}_{P_t}$ where $\vec{\Delta}_{P_t}$ is a vector of price changes for year t, as given in Table I.

4. Converting Final Demand Prices to Aggregate Demand Prices.

The price increases which we have calculated above are not recorded in the market place until the goods and services are actually sold. No one buys "final demand of the food industry" as such; they buy food, beverages, or other edible products. In calculating the price increases for the consumer price index or GNP deflator, we want to make sure that we do not count each price increase more than once. A price increase of 2% in steel and 1% in cars because steel prices went up is clearly not a 3% increase overall.

Thus in order to calculate how much product prices are actually changing, we need first to convert the final demand prices to aggregate demand prices. In order to do this, we use a reverse bridge matrix, which consists of equations of the following type:

$$\Delta P_{CI_{FB}} = b_1 \Delta P_{(I/o)_1} + \ldots + b_5 \Delta P_{(I/o)_{14}} + \ldots$$

where

$P_{CI_{FB}}$ = consumer price index for food and beverages

$P(I/O)_j$ = price index for j^{th} Input/output commodity

The b_i's for these equations are given in supplementary tables to the 1963 I/O matrix and hence do not have to be calculated by regression techniques.

The actual changes in all of the price components of aggregate demand, before final mark-up factors have been included, are given in Table II.2.

Table II.3

Changes in Input Prices for Components of Aggregate Demand, by Category, on an Annual Basis
Incremental Changes Only

	1972	1973	1974	1975	1976	1977	1978	1979	1980
Consumption									
Autos	.0075	.0131	.0045	.0157	.0082	.0001	.0001	.0002	.0004
Tires & Parts	.0022	.0044	.0071	.0103	.0053	.0012	.0011	.0011	.0010
Household Appliances	.0023	.0041	.0086	.0099	.0041	.0011	.0011	.0011	.0010
Furniture & Fixtures	.0014	.0024	.0048	.0055	.0024	.0007	.0007	.0006	.0006
Other Durables	.0019	.0030	.0061	.0070	.0030	.0009	.0009	.0008	.0008
Food & Beverages	.0025	.0031	.0043	.0047	.0033	.0010	.0010	.0010	.0010
Clothing & Shoes	.0025	.0029	.0039	.0042	.0030	.0010	.0010	.0010	.0010
Other Nondurables	.0035	.0049	.0101	.0110	.0056	.0019	.0018	.0017	.0016
Housing	.0002	.0004	.0007	.0008	.0004	.0001	.0001	.0001	.0001
Transportation & Other Services	.0020	.0041	.0062	.0072	.0028	.0008	.0008	.0008	.0007
Investment									
Pland & Equipment	.0020	.0104	.0150	.0302	.0160	.0008	.0008	.0008	.0008
Exports									
Crude Materials	.0002	.0003	.0007	.0008	.0004	.0001	.0001	.0001	.0001
Food & Beverages	.0004	.0005	.0008	.0010	.0006	.0002	.0002	.0002	.0002
Semi-Manufactured Goods	.0015	.0022	.0044	.0050	.0023	.0008	.0008	.0007	.0007
Finished Goods	.0010	.0048	.0071	.0137	.0071	.0004	.0005	.0004	.0004

5. Adding Markup Factors to the Price Equations for Aggregate Demand

The numbers contained in Table II.3 have been labelled "ex ante price increases," which is perhaps another way of saying that they are input price changes - the amount that prices would change only if there were 100% pass-along and no change in capacity utilization. Just as we introduced mark-up factors at the industry level, we need to do so at the aggregate demand level as well. The markup factors, taken from the price equations of the Chase Econometrics macromodel, are given in Table II.4

Table II.4

Markup Factors of Price Equations for Aggregate Demand

Price Variable			
Consumption		Investment	0.50
New cars	0.90[a]	Equipment	0.50
Tires and parts (price is exogenous)	1.0	Structures	*
Household appliances	1.05	Housing	*
Furniture and furnishings	1.08	Exports	
Other durables	0.98	Crude materials	0.38
Food and beverages	0.85	Semi-mfg. goods	0.90
Clothing	1.01	Food and beverages	0.85
Other nondurables	0.83	Finished goods	0.93
Housing services	0.89		
Other services	1.13		

(a) Taken from auto study done for EPA by Chase Econometrics

*Not applicable - Value added for construction industry is unaffected by pollution requirements; increase in the cost of materials is handled directly by inclusion of the wholesale price index in that equation.

A few comments are in order on Table II.4. First, the markups on consumption are all close to unity, with those for non-auto durables and also consumption of services exceeding unity by slight amounts. Second, the increase in the wholesale price index, which is not shown in this table, is calculated as a weighted average of the increases in the prices for consumer duables, consumer nondurables, and producers durable equipment. Third, the markup factor for equipment appears to be unreasonably low, but excludes the term 0.86 * Δwholesale price index, (WPI). When the calculated increase in the WPI is multiplied by 0.86 and this term is added to 0.50 times the ex ante increase in equipment prices given in Table III, the total markup for equipment is very close to 0.9.

6. Using the Macro Model to Calculate Dynamic Effects and Equilibrium Levels.

We now take the increases in the price terms for the components of aggregate demand, which are equal to the ex ante increases given in Table II.3. times the markup factors of Table IV, and add them to the constant terms for each of the price equations in the macromodel. We also adjust the investment function, as will be explained in the next section. Using the Chase Econometrics model we have calculated several different alternative projections, which are listed next.

I. Full Employment

A. No increase in pollution costs (baseline solution)

B. Increase in costs as given above

1) no offsetting action
2) offsetting government policy

C. B-1, B-2 repeated but with different amounts of pollution control costs

1) 75% of B case
2) 125% "
3) 150% "

II. Low Employment

Calculations (A) - (C) repeated in detail

The runs which have been calculated assume that no additional guidelines for pollution control are enacted in foreign countries, and hence our net export situation suffers accordingly. In the conclusion we discuss alternative policies which might offset the deterioration in the net foreign balance.

The results of these projections are discussed in some detail in the following sections of this report. Before proceeding to these results, however, we discuss the changes made to the investment function.

7. Adjustments to the Investment Function

The first and most straightforward adjustment of investment is simply to adjust the constant term of the investment function by the amount of additional investment which will be required for pollution control. These figures have been supplied by EPA in 1971 dollars; we have reconverted them to 1958 dollars, since our investment equation for equipment is estimated in those terms. The rebased adjustments are:

	Billions of 1958 dollars
1972	1.53
1973	1.92
1974	3.61
1975	4.20
1976	2.59
1977	1.29
1978	1.33
1979	1.36
1980	1.39

However, it is extremely unlikely that investment will increase by the

full amount. First, an increase in investment for a given level of unborrowed reserves and growth in the money supply will usually lead to higher interest rates and greater credit rationing. While these changes may cause a greater decline in housing than they will in fixed business investment, some drop is likely to occur in both sectors. No explicit adjustment is needed for this dynamic effect; only in the runs which incorporate offsetting government policy is this relationship specifically noted, and there only to offset it.

The second adjustment involves the user cost of capital term, which theoretically represents the equilibrium rate which must be earned if a given investment is to be profitable. An increase in this rate will result in fewer investment projects being undertaken, since the rate of return which must then be earned has risen.

The components of the user cost are generally thought to be (a) the interest rate, (b) rate of economic depreciation,(c) product prices, (d) the supply-price of capital goods, (e) corporate income tax rate, and (f) depreciation laws, including the investment tax credit. Yet none of these variables is specifically affected by the imposition of pollution control standards. Because some investment is now non-productive in the sense that it does not increase (and may even decrease) output, it is clear that the rate on productive investment will have to rise somewhat if the previous level of return is to be maintained. Hence the addition of pollution control costs to investment projects should result in some rise in user cost. In these simulations we have raised the user cost of capital equipment by the proportion equal to the additional investment required by pollution control divided by total baseline investment in any given year.

One final adjustment should be noted. We have "short-circuited" any increase in the capital stock due to the increased pollution control standards by the simple expedient of not adding it to the baseline capital stock projection. Thus there is no additional change in the capital/labor or labor/output ratios as a result of this increased investment.

III. Economic Impact of Pollution Control Standards

A. Baseline Projections

We have prepared simulations for both the "full employment" and "recession" cases, partly because of the possibility that the economy will not return to full employment in the near future, and partly to measure the differential effects of a given cost increase at 4½% and 6% unemployment. However, since the official government long-range projections utilize a full-employment scenario, we have considered that case to be primary, and use the recession case only as an alternative.

In projecting the economy to 1980 using a full employment scenario, we have adjusted fiscal and monetary policy to achieve the following results:

1. The unemployment rate remains at approximately 4.5% during the latter half of the 1970's.
2. The rate of inflation, as measured by the implicit GNP deflator, fluctuates between 3 and 4% during the decade but declines to 3% by 1980.
3. The economy grows at an average rate of 4 2/3% in constant prices during the decade.
4. The Federal government budget registers a slight surplus during the latter half of the decade.
5. The net foreign balance rises to $ 3.5 billion in 1972 and 1973, but then deteriorates in the following years. The slight turnaround near the end of the decade is due more to a step-up in the rate of increase of import prices rather than a better performance in export markets.

Using these standards to formulate a "baseline" simulation, we have then calculated the effects of additional costs caused by the implementation of existing

pollution control standards. The cost estimates supplied by CEQ and EPA can be denoted as the "median change" case. We then calculate the effect of increases in costs which are 75%, 125%, and 150% of the median change.

In addition to determining how the economy would be affected by different levels of pollution control costs, we have also prepared additional simulations where we use monetary and fiscal policy to return the economy to the level of output and unemployment which would have existed without any pollution control costs - i.e., the baseline estimates. These simulations, known as the "offset" runs, are also calculated for the various cost levels listed above.

The projections of the Chase Econometric Macro Model which we have been using in our actual forecasts show another recession in 1974-1975 as the result of increasingly stringent monetary and fiscal policies in 1973, after which the economy gradually drifts back toward full employment. We have kept the recession in the alternative runs but have then continued deflationary fiscal and monetary policy to the extent that the unemployment rate remains at 5½% for the remainder of the decade. The other hallmarks of the recession-based simulation are as follows:

1. The rate of inflation, as measured by the implicit GNP deflator, declines to 2.4% in 1975 and averages only 2.5% during the last six years of the decade. The average increase over the same period for the consumer price index is 2.7%.
2. The growth rate of the economy is rather erratic, rising from 3% to 6% back down to 3%, back up to 6%, and finally down to about 4%. However, the average growth rate is slightly under 4½% for the decade.
3. The Federal budget deficit is substantial during the first half of the decade, but turns into a small surplus by 1980. While it might be expected that the government would run a substantial deficit with the unemployment rate well above 5% for

extended periods of time, it should be recalled that fiscal and monetary policy have been adjusted to create this recession run.

4. The net foreign balance continues to improve until 1976, when it reaches a high value of $ 6.7 billion. It declines slightly but then recovers by 1980. This is in sharp contrast to the full employment runs, where the net foreign balance averages only $ 1.2 billion per year over the decade.

Just as we have done for the full employment simulations, we have used this run for a "recession baseline" and have then calculated the effects of additional costs caused by the implementation of existing pollution control standards for the median change and 75%, 125%, and 150% of the median change. We have also prepared additional simulations where we use monetary and fiscal policy to return the economy to the level of output and unemployment which are found in the recession baseline simulation. These offset calculations do show the nonlinearities inherent in the model, since much smaller changes in the levels of monetary and fiscal policy are needed to return the economy to its pre-existing position. However, the calculations are of limited usefulness with respect to a specific goal of the government. Holding the economy at full employment in the face of exogenous disturbances which tend to lower aggregate demand is an interesting exercise in its own right. However, holding the economy at 5½% is not likely to be considered a goal of present or future administrations, and hence the offset runs for the recession cases are of less significance. The recession simulations have been calculated because of the reasonably high probability that the economy will enter another recession phase during this decade. Thus it is important to assess the differences which pollution control standards have on output, employment, and other key economic variables during relatively depressed economic conditions.

B. Effects of Median Changes in Pollution Costs on the Economy

The effects of pollution control costs on the key economic policy variables for the median change run at full employment are given in Table III.1. They can be summarized briefly as follows:

a. Without Government offset: Full Employment Case

1. By 1976, the wholesale price index will be 2.9% higher, the implicit GNP deflator will be 1.7% higher, and the consumer price index will be 1.5% higher. After that, lower levels of capacity utilization and higher levels of unemployment lead to a slower rate of price increase, so that by 1980 the differentials are 2.8%, 0.9%, and 0.0% respectively.

2. Constant-dollar GNP is $ 13 billion lower in 1976 but rises to only $ 8 billion less in 1980. The unemployment rate reaches a maximum differential of 0.18%, which narrows to 0.15% in 1980.

3. The net foreign balance declines an additional $ 1.9 billion in 1975 (when the maximum disturbance occurs), but the differential narrows to $ 0.2 billion by 1980.

4. In spite of the additional expenditures for pollution control investment, fixed business investment in constant dollars is $ 0.1 billion lower in 1976 and $ 1.2 billion lower in 1980. Higher capital goods prices, a lower rate of return on invested capital, and the decline in output all contribute to this reduction.

5. Housing starts, which usually are hit hardest by the increase in demand for funds elsewhere in the economy, decline by 0.09 million units in 1976. They recover, however, by 1980 and are 0.03 million units higher, since the price differential narrows and fixed business investment declines.

The results,however, are much different if the government maintains the baseline level of output and employment,as is shown next.

b. With Government Offset: Full Employment Case

1. By 1976, the wholesale price index will be 2.9% higher, the implicit GNP deflator will be 1.8% higher, and the consumer price index will be 1.5% higher. These results are similar to the ones obtained without the government offset. The price increases continue, however, as higher levels of prices coupled with the same level of unemployment lead to larger wage increases, so that by 1980 the differentials are 3.7%, 2.6%, and 2.4% respectively.

2. Constant-dollar GNP and the rate of unemployment are assumed to stay at the baseline levels.

3. The net foreign balance is $ 2.2 billion lower in 1976 and $ 2.8 billion lower by 1980.

4. Fixed business investment is constant dollars is higher by $ 1.5 billion in 1976, as the added stimuli of increased pollution control expenditures and easier money more than balance the higher prices and lower rate of return . However, the continued rise in prices, plus the lack of any substantial incremental investment for pollution control in the latter half of the decade, finally leads to a level which is lower by $ 0.2 billion.

5. Housing starts are 0.14 million units lower in both 1976 and 1980. Note that even though we have expanded the money supply and kept interest rates at about the same level, housing starts decline throughout the decade. This is primarily due to higher prices for housing.

The increases in Federal purchases of goods and services, state and local government purchases, transfer payments, and unborrowed reserves (the chief monetary policy variable in the model) are given in Table III.2. Since we are specifically positing an expansionary policy, it is assumed that both Federal and state and local

Table III.1

Effects on Selected Macroeconomic Variables for Median Change in Pollution Control Costs

Full Employment Case

	1972	1973	1974	1975	1976	1977	1978	1979	1980
Gross National Product, current dollars									
Baseline projection	1147.7	1267.4	1374.9	1480.3	1611.9	1747.3	1886.0	2033.0	2187.2
With pollution control costs	1151.8	1271.5	1381.6	1487.4	1616.0	1751.1	1891.6	2038.2	2190.4
Difference	4.1	4.1	6.7	7.1	4.1	3.8	5.6	5.2	3.2
With offsetting government policy	1151.8	1271.5	1385.7	1502.8	1641.5	1782.7	1926.2	2080.0	2245.4
Difference (from baseline)	4.1	4.1	10.8	22.5	29.6	35.4	40.2	47.0	58.2
Gross National Product, constant dollars									
Baseline projection	786.4	836.6	875.7	907.8	954.3	997.3	1038.8	1083.6	1131.5
With pollution control costs	788.4	835.7	872.4	899.4	941.2	984.8	1029.0	1075.0	1123.2
Difference	2.0	-0.9	-3.3	-8.4	-13.1	-12.5	-9.8	-8.6	-8.3
With offsetting government policy	788.4	835.7	874.6	907.8	954.1	997.6	1038.6	1083.2	1131.7
Difference (from baseline)	(not calculated)								
Implicit GNP Deflator, 1958=100.0									
Baseline projection	145.9	151.5	157.0	163.0	168.9	175.2	181.5	187.6	193.3
With pollution control costs	146.1	152.1	158.4	165.4	171.7	177.8	183.8	189.6	195.0
Difference	0.2	0.6	1.4	2.4	2.8	2.6	2.3	2.0	1.7
With offsetting government policy	146.1	152.1	158.4	165.5	172.0	178.7	185.4	192.0	198.4
Difference (from baseline)	0.2	0.6	1.4	2.5	3.1	3.5	3.9	4.4	5.1
Consumer Price Index, 1967=100.0									
Baseline projection	124.8	129.9	135.6	141.7	147.4	153.5	159.6	165.3	170.6
With pollution control costs	125.0	130.6	137.0	143.6	149.2	154.8	160.4	165.7	170.6
Difference	0.2	0.7	1.4	1.9	1.8	1.3	0.8	0.4	0.0
With offsetting government policy	125.0	130.6	137.0	143.7	149.6	155.9	162.4	168.6	174.7
Difference (from baseline)	0.2	0.7	1.4	2.0	2.2	2.4	2.8	3.3	4.1
Wholesale Price Index, 1967=100.0									
Baseline projection	116.1	117.9	119.8	122.3	124.5	126.5	128.3	129.5	130.4
With pollution control costs	116.3	118.7	121.5	125.3	128.1	130.1	131.8	133.1	134.0
Difference	0.2	0.8	1.7	3.0	3.6	3.6	3.5	3.6	3.6
With offsetting government policy	116.3	118.7	121.5	125.3	128.2	130.4	132.4	134.0	135.3
Difference (from baseline)	0.2	0.8	1.7	3.0	3.7	3.9	4.1	4.5	4.9
Net Foreign Balance									
Baseline projection	3.5	3.5	1.6	1.0	0.2	-1.1	-1.1	0.7	3.3
With pollution control costs	2.9	2.7	0.1	-.9	-.8	-1.3	-1.2	.6	3.1
Difference	-.6	-.8	-1.5	-1.9	-1.0	-0.2	-0.1	-0.1	-0.2
With offsetting government policy	2.9	2.7	0.1	-1.3	-2.0	-3.4	-3.4	-1.8	0.5
Difference (from baseline)	-.6	-.8	-1.5	-2.3	-2.2	-2.3	-2.3	-2.5	-2.8

Table III.1 (Cont'd)

	1972	1973	1974	1975	1976	1977	1978	1979	1980
Unemployment Rate, percent									
Baseline projection	5.41	4.93	4.70	4.73	4.38	4.37	4.44	4.44	4.47
With pollution control costs	5.39	4.99	4.81	4.90	4.52	4.55	4.61	4.59	4.62
Difference	.02	.06	.11	.17	.14	.18	.17	.15	.15
With offsetting government policy	5.39	4.99	4.79	4.81	4.38	4.40	4.48	4.43	4.45
Difference (from baseline)	(not calculated)								
Fixed Business Investment, constant dollars									
Baseline projection	83.6	93.0	101.4	105.7	112.4	118.3	123.3	129.2	135.1
With pollution control costs	85.4	95.0	104.5	108.5	112.3	116.5	121.5	127.7	133.9
Difference	1.8	2.0	3.1	2.8	-0.1	-1.8	-1.8	-1.5	-1.2
With offsetting government policy	85.4	95.0	104.6	109.6	113.9	118.2	122.6	128.8	134.9
Difference (from baseline)	1.8	2.0	3.2	3.9	1.5	-0.1	-0.7	-0.4	-0.2
Housing Starts, millions									
Baseline projection	2.09	1.95	1.71	1.76	1.87	1.99	2.12	2.21	2.35
With pollution control costs	2.07	1.88	1.59	1.63	1.78	1.99	2.18	2.28	2.38
Difference	-.02	-.07	-.12	-.13	-.09	.00	.06	.07	.03
With offsetting government policy	2.07	1.88	1.59	1.61	1.72	1.91	2.06	2.12	2.21
Difference (from baseline)	-.02	-.07	-.12	-.15	-.15	-.08	-.06	-.09	-.14
Percentage Growth Rate of GNP, constant dollars									
Baseline projection	5.98	6.38	4.68	3.67	5.12	4.51	4.16	4.31	4.42
With pollution control costs	6.25	6.00	4.38	3.10	4.64	4.63	4.49	4.46	4.48
Difference	.27	-.38	-.30	-.57	-.48	.12	.33	.15	.06
With offsetting government policy	6.25	6.00	4.64	3.80	5.10	4.56	4.11	4.29	4.48
Difference (from baseline)	(not calculated)								
Percentage Growth Rate of Consumer Price Index									
Baseline projection	2.97	4.13	4.39	4.48	3.98	4.17	3.96	3.56	3.21
With pollution control costs	3.17	4.47	4.88	4.83	3.87	3.80	3.61	3.29	2.99
Difference	.20	.34	.49	.35	-.11	-.37	-.35	-.27	-.22
With offsetting government policy	3.17	4.47	4.87	4.88	4.10	4.27	4.16	3.83	3.57
Difference (from baseline)	.20	.34	.48	.40	.12	.10	.20	.27	.36

N.B. The "difference" for constant-dollar GNP and the unemployment rate has not been calculated for the simulation with offsetting government policy, since that run was designed to duplicate the baseline projection for those two variables.

Table III.2

Changes in Exogenous Variables for Offset Run--100% of Median Change

Full Employment Case

	1972	1973	1974	1975	1976	1977	1978	1979	1980
Unborrowed Reserves									
Baseline	33.3	35.7	39.2	43.3	47.3	51.6	56.0	60.5	64.8
Offset	33.3	35.7	39.2	43.2	47.4	51.9	56.7	61.5	66.3
Government Employment									
Baseline	13.18	13.55	14.02	14.62	15.22	16.00	16.68	17.40	18.20
Offset	18.18	13.55	14.05	14.71	15.32	16.10	16.78	17.50	18.30
Federal Government Non-Defense Purchases of Goods and Services									
Baseline	26.1	29.9	33.1	35.9	38.7	41.5	45.1	49.9	55.0
Offset	26.1	29.9	33.1	35.9	38.7	42.2	46.9	52.2	57.8
State and Local Government Purchases									
Baseline	150.2	166.2	183.1	202.6	223.7	246.9	272.1	301.0	332.2
Offset	150.2	166.2	186.4	210.1	231.7	254.9	279.9	309.0	342.2
Other Federal Transfer Payments									
Baseline	21.5	28.8	33.0	35.5	39.5	43.5	47.5	54.0	62.0
Offset	21.5	28.8	34.5	41.8	52.0	54.8	58.5	65.0	73.0

All figures are in billion of current dollars except government employment, in millions.

government spending are financed through increased deficits with no additional taxes and no tightening in monetary policy.

As had been expected, the reduction of output and employment stemming from the increased costs of pollution control equipment far outweigh the increase which results from increased investment. Because of this, it is probably more important to consider the offset simulations, since there we introduce fiscal and monetary policies which keep constant-dollar GNP and the unemployment rate at the same levels which were recorded in the baseline simulation. It is apparent from both our verbal summary and Table III.1 that a surprisingly large amount of additional inflation must be generated in order to raise real GNP less than one additional percent. This exercise points out one of the most important findings of the report, namely that the additional burdens of pollution control standards will cause significant additional inflation if at the same time the economy is maintained at full employment.

One of the most striking results of these simulations is the amount which the net foreign balance deteriorates in the government offset simulations. Yet this should not really be much of a surprise. An increase in domestic prices at the same level of real output is bound to increase imports and decrease exports in constant dollars if not in current dollars as well. We have estimated the price elasticities for imports of finished goods to be approximately -1.5 and for other imports to be -0.9. Thus an increase of approximately 2½% in the overall price index should reduce imports of goods approximately 3% by 1980.

There are, of course, several counter measures which could be taken to reduce this trade deficit, some of which are discussed in the conclusion. For example, a 3% rise in foreign prices relative to domestic prices would eliminate any deterioration in the net foreign balance due to pollution control standards,

and there are several different ways to accomplish this. In any case we do point out that a decline of $ 2 to $ 3 billion in the net foreign balance clearly is consistent with a price level which is 3% higher by the end of the decade.

We might briefly mention the effects of two other variables of interest and importance: the Federal government budget and the corporate bond rate. We have not included these variables in Table III.1 because they are almost too dependent on the choice of exogenous policy instruments which are used in the government offset calculations. We have, for example, chosen a monetary policy which keeps interest rates close to baseline levels. With respect to the government budget, it might be noted that although we have increased Federal government spending by $ 14 billion, the surplus declines only $ 5½ billion. The difference is made up by increased taxes resulting from the higher nominal value of personal and corporate incomes. Tax rates changes are not used as a tool of fiscal policy in these simulations.

In comparing the recession baseline simulations, we are interested not only in the relative changes caused by spending for pollution controls but the differences between the full employment and recession cases. The summary results for the median change in costs are given next. Further detail is provided in Table III.3.

a. Without Government Offset: Recession Case

1. By 1976 the wholesale price index will be 2.9% higher, the implicit GNP deflator will be 1.7% higher, and the consumer price index will be 1.5% higher. Note that these are the same percentage increases which occur under the full employment baseline simulations. This strongly suggests that the costs associated with pollution control investment will be passed along in the form of higher prices whether or not

the economy is at full employment. Furthermore, the changes by 1980 are 2.4%, 0.8%, and 0.0% respectively, which are very similar although somewhat lower than the full employment changes.

2. Constant-dollar GNP is $ 13 billion lower in 1976 and $ 10 billion lower in 1980. The unemployment differential reaches 0.2% in 1976 and declines to 0.1% in 1980, which again is very similar to the full employment situation.

3. The net foreign balance is $ 2.6 billion lower in 1975, with the differential narrowing to $ 0.5 billion by 1980. These numbers are slightly larger than for the full employment situation. When the economy retreats from full employment, imports decline proportionately more and hence the net export gap does not widen as rapidly in spite of the same degree of price increase.

4. Fixed business investment in constant dollar is $ 0.1 billion lower in 1976 and $ 1.3 billion lower in 1980. These results are almost identical with the full employment case.

5. Housing starts are 0.08 million units lower in 1976 but are 0.04 million units higher in 1980.

We have seen thus far that the increases in costs due to pollution control standards have about the same effect on the economy whether the unemployment rate is 4½% or 6%. These similarities disappear, however, when we consider the government offsets needed to return the economy to the same level of output and employment; this is shown next.

b. With Government Offset: Recession Case

1. By 1976, the wholesale price index, implicit GNP deflator and consumer price index will be 2.9%, 1.8%, and 1.5% higher. However even with the government offset they will only be 2.9%, 1.8%, and 1.1% higher by 1980. This contrasts sharply with the full

employment differentials of 3.7%, 2.6%, and 2.4% respectively.

2. Constant-dollar GNP and the rate of unemployment are assumed to remain at their recession baseline levels.

3. The net foreign balance is $ 2.9 billion lower in 1976 and $ 2.2 billion lower by 1980. Here the pattern is reversed from the full employment case where the differential continues to increase during the decade. This is clearly due to the narrowing differential in price changes during the latter half of the decade in the recession case.

4. Fixed business investment in constant dollars is higher by $ 1.8 billion in 1976 and $ 0.9 billion in 1980. In the full employment case the differential became negative by 1980. However, the slower rise in prices and hence somewhat easier monetary conditions result in some net improvement in investment throughout the decade.

5. Housing starts are 0.06 million units lower in 1976 and 0.08 million units lower in 1980.

Part of the reason for the much lower price increases in the latter half of the decade in the recession situations is the somewhat smaller fiscal stimulus needed to return the economy to its previous level. This in turn is due to the fact that a smaller proportion of every additional dollar goes into increased prices, since the economy is not near full employment. This can be seen by examining the results in Tables III.2 and III.4. The results in Table III.2 show that in the full employment offset Federal purchases of goods and services went up $ 3 billion, expenditures went up $ 10 billion and Federal transfer payments went up $ 11 billion. By comparison, in the recession offset, Federal purchases still went up $ 3 billion, Federal, state and local expenditures went up $ 11 billion, but Federal transfer payments went up only $ 6½ billion. In addition, free reserves increased by $ 1.5 billion in the full employment case and by only $ 1 billion in the recession case.

Table III.3

Effects on Selected Macroeconomic Variables for Median Change in Pollution Control Costs

	Recession Case 1972	1973	1974	1975	1976	1977	1978	1979	1980
Gross National Product, current dollars									
Baseline projection	1146.8	1243.5	1325.2	1423.3	1543.8	1673.5	1866.2	1944.7	2085.7
With pollution control costs	1150.9	1247.3	1330.3	1429.5	1548.6	1678.6	1811.5	1946.4	2083.4
Difference	4.1	3.8	5.1	6.2	4.8	5.1	5.3	1.7	-2.3
With offsetting government policy	1150.9	1247.3	1344.1	1444.5	1571.6	1702.3	1835.6	1976.0	2122.3
Difference (from baseline)	4.1	3.8	8.9	21.2	27.8	28.8	29.4	31.3	36.6
Gross National Product, constant dollars									
Baseline projection	785.9	821.0	848.5	899.9	946.7	1002.5	1053.1	1102.0	1149.0
With pollution control costs	787.9	820.0	844.2	880.6	933.2	989.8	1042.6	1091.5	1138.7
Difference	2.0	-1.0	-4.3	-9.3	-13.5	-12.7	-10.5	-10.5	-10.3
With offsetting government policy	787.9	820.0	846.2	889.0	945.9	1001.1	1051.7	1101.1	1149.2
Difference (from baseline)	(not Calculated)								
Implicit GNP Deflator, 1958=100.0									
Baseline projection	145.9	151.4	156.2	159.9	163.1	166.9	171.5	176.5	181.5
With pollution control costs	146.1	152.1	157.6	162.3	165.9	169.6	173.7	178.3	182.9
Difference	.2	.7	1.4	2.4	2.8	2.7	2.2	1.8	1.4
With offsetting government policy	146.1	152.1	157.6	162.5	166.1	170.0	174.5	179.5	184.7
Difference (from baseline)	.2	.7	1.4	2.6	3.0	3.1	3.0	3.0	3.2
Consumer Price Index, 1967=100.0									
Baseline projection	124.8	129.8	134.3	137.6	140.2	143.8	148.0	152.6	157.3
With pollution control costs	125.0	130.5	135.8	139.7	142.3	145.4	149.1	153.1	157.2
Difference	.2	.7	1.5	2.1	2.1	1.6	1.1	.5	0
With offsetting government policy	125.0	130.5	135.8	139.7	142.4	145.8	149.8	154.3	159.0
Difference (from baseline)	.2	.7	1.5	2.1	2.2	2.0	1.9	1.7	1.8
Wholesale Price Index, 1967=100.0									
Baseline projection	116.1	117.7	119.3	120.8	121.6	122.6	123.9	124.9	125.9
With pollution control costs	116.3	118.5	121.0	123.8	125.2	126.1	127.1	128.1	128.9
Difference	.2	.8	1.7	3.0	3.6	3.5	3.2	3.2	3.0
With offsetting government policy	116.3	118.5	121.0	123.8	125.7	126.3	127.4	128.6	129.6
Difference (from baseline)	.2	.8	1.7	3.0	3.6	3.7	3.5	3.7	3.7

Table III.3 (Cont'd.)

	1972	1973	1974	1975	1976	1977	1978	1979	1980
Net Foreign Balance									
Baseline projection	3.5	4.5	5.3	6.2	6.7	5.5	4.9	5.8	7.7
With pollution control costs	2.9	3.7	3.6	3.8	4.8	4.4	4.1	5.1	7.2
Difference	-.6	-.8	-1.7	-2.4	-1.9	-1.1	-.8	-.7	-.5
With offsetting government policy	2.9	3.7	3.6	3.4	3.8	3.0	2.7	3.6	5.5
Difference (from baseline)	-.6	-.8	-1.7	-2.8	-2.9	-2.5	-2.2	-2.2	-2.2
Unemployment Rate, percent									
Baseline projection	5.41	5.65	6.16	6.04	5.59	5.48	5.45	5.41	5.40
With pollution control costs	5.38	5.75	6.30	6.26	5.70	5.56	5.55	5.51	5.52
Difference	-.03	.10	.14	.22	.11	.08	.10	.10	.08
With offsetting government policy	5.38	5.75	6.29	6.18	5.60	5.47	5.43	5.37	5.39
Difference (from baseline)	(not calculated)								
Fixed Business Investment, constant dollars									
Baseline projection	112.1	117.4	120.0	127.1	137.2	148.4	156.7	164.2	171.0
With pollution control costs	113.7	118.6	121.8	128.2	135.9	146.5	155.7	163.5	170.3
Difference	1.6	1.2	1.8	1.1	-1.3	-1.9	-1.0	-.7	-.7
With offsetting government policy	113.7	118.6	122.0	129.6	138.1	148.3	156.9	164.5	171.1
Difference (from baseline)	1.6	1.2	2.0	2.5	.9	-.1	.2	.3	.1
Housing Starts, millions									
Baseline projection	2.03	1.86	1.77	1.90	2.20	2.45	2.54	2.52	2.54
With pollution control costs	2.01	1.80	1.67	1.78	2.12	2.45	2.60	2.59	2.58
Difference	-.02	-.06	-.10	-.12	-.08	0	.06	.07	.04
With offsetting government policy	2.01	1.80	1.68	1.81	2.14	2.45	2.56	2.51	2.46
Difference (from baseline)	-.02	-.06	-.09	-.09	-.06	0	.02	-.01	-.08
Percentage Growth Rate of GNP, constant dollars									
Baseline projection	5.91	4.47	3.35	4.48	6.38	5.90	5.04	4.65	4.27
With pollution control costs	6.18	4.08	2.94	4.32	5.98	6.06	5.34	4.69	4.33
Difference	.27	-.39	-.41	-.56	-.40	.16	.30	.04	.06
With offsetting government policy	6.18	4.08	-3.19	5.06	6.40	5.83	5.06	4.68	4.38
Difference (from baseline)	(not calculated)								
Percentage Growth Rate of Consumer Price Index									
Baseline projection	2.97	4.06	3.42	2.45	1.89	2.56	2.96	3.09	3.04
With pollution control costs	3.17	4.42	4.00	2.91	1.85	2.16	2.54	2.72	2.67
Difference	.20	.36	.58	.46	-.04	-.40	-.42	-.37	-.37
With offsetting government policy	3.17	4.42	3.99	2.91	1.95	2.35	2.76	2.99	3.04
Difference (from Baseline)	.20	.36	.57	.46	.06	-.21	-.20	-.10	0

Table III.4

Changes in Exogenous Variables for Offset Run--100% of Median Change

Reccession Case

	1972	1973	1974	1975	1976	1977	1978	1979	1980
Unborrowed Reserves									
Baseline	33.3	35.55	38.07	41.65	45.50	49.50	53.50	57.50	61.50
Offset	33.3	35.55	38.25	42.20	46.40	50.75	55.15	59.55	62.45
Government Employment									
Baseline	13.18	13.55	14.02	14.62	15.23	15.99	16.67	17.40	18.20
Offset	13.18	13.55	14.05	14.71	15.33	16.09	16.77	17.50	18.30
Federal Government Non-Defense Purchases of Goods and Services									
Baseline	26.0	29.8	33.0	35.8	38.6	41.4	45.1	49.9	55.0
Offset	26.0	29.8	33.0	35.8	38.6	42.2	46.9	52.1	57.7
State and Local Government, Purchases									
Baseline	150.2	166.2	183.4	120.6	233.6	246.9	272.1	300.9	330.7
Offset	150.2	166.2	186.4	210.1	231.6	254.9	279.9	308.9	342.2
Other Federal Transfer Payments									
Baseline	21.5	26.2	32.5	36.5	40.5	44.5	48.5	52.5	56.5
Offset	21.5	26.2	33.7	41.7	48.5	50.2	53.5	57.5	63.0

C. Economic Impacts for Alternative Assumptions About Pollution Costs

We have already discussed how the nonlinearities of the Model lead to different policy implications for full employment and recession situations. Also because of these nonlinear effects, a change in costs which is 150% of the median change will have a more than proportional effect on prices and output and hence require more than proportional increases in fiscal and monetary policy for the offsets. This effect is most pronounced for the full employment case, although it appears in the recession simulations as well. Since the non-proportional effects are largest for the 150% cases, and since these cases are probably the most important because they set a reasonable upper limit on pollution control costs under existing legislation, we discuss only these cases in detail. Tables III.5 - III.8 provide additional detail for the 150% cases, while similar detail is given for the 75% and 125% cases in Tables III.9 - III.16. In addition, copies of the complete summary tables of all of the simulations are included in the Appendix to this report.

We first consider the full employment run with 150% of the median cost changes and the government offset. The results are summarized next, with the numbers in parantheses referring to the analogous results for the 100% run.

1. By 1976, the wholesale price index will be 4.5% (2.9%) higher, the implicit GNP deflator will be 2.8% (1.8%) higher, and the consumer price index will be 2.4% (1.5%) higher. By 1980 the differentials become 5.6% (3.7%), 4.0% (2.6%), and 3.8% (2.4%) respectively.

2. The net foreign balance is $ 3.4 ($2.2) billion lower in 1976 and $ 4.5 ($2.8) billion lower by 1980.

3. Fixed business investment in constant dollars is $2.6 ($1.5) billion higher in 1976, but $ 0.1 ($0.2) billion lower in 1980.

4. Housing starts are 0.27 (0.14) million lower in 1976 and 0.26 (0.14) million lower in 1980.

In addition, the Federal government surplus, which had only declined from $ 7.7 billion to $ 2.2 billion in the 100% offset run, now registers - $ 3.7 billion.

It can be seen that there are important nonlinearities in the Model as the amount of fiscal stimulus increases. Prices rise more than 1.5 times the median change simulation, and the net foreign balance declines more than 1.5 times as much. Fixed busines investment rises proportionately less and housing starts are relatively much harder hit. Thus if pollution control costs are 150% of the median estimates used in this study, which is not unlikely, and steps are taken to offset the rise in unemployment but not in prices, prices could be as much as 4% higher above the baseline solution and the net foreign balance could be as much as $ 4.5 billion lower by 1980.

For the recession case we observe the following results:

1. By 1976, the wholesale price index will be 4.7% (2.9%) higher, the implicit GNP deflator will be 3.1% (1.8%) higher, and the consumer price index will be 2.6% (1.5%) higher. By 1980 the differentials become 4.9% (2.9%), 3.3% (1.8%), and 2.4% (1.1%) higher.

2. The net foreign balance is $ 3.8 ($2.9) billion lower in 1976 and $ 2.4 ($2.2) billion in 1980.

3. Fixed business investment in constant dollar is $ 3.2 ($1.8) billion higher in 1976 but only $ 0.7 ($0.9) billion higher in 1980.

4. Housing starts are 0.12 (0.06) million units lower in 1976 and 0.09 (0.08) million units lower in 1980.

The changes in fixed business investment for the 100% and 150% cost changes are not strictly comparable, since in order to get both output and unemployment to return to their baseline values, we altered the mix of monetary and fiscal policy somewhat. The net result is that monetary policy becomes somewhat easier with the 150% case than with the 100% case, thus raising pri es and investment somewhat more than would otherwise be the case. For this context it may be worthwhile to note that in the Model, just as in the real world, different mixes of fiscal and monetary policy which have the same overall effect on GNP or the budget deficit may have quite different effects on the mix of GNP and hence on employment and prices.

The main thrust of the 150% recession case simulations is that consumer prices would rise by an additional ½% per year throughout the decade, compared to an additional annual increment of 0.4% for the full employment case. Thus even if the economy were not near full employment, maintaining output and employment at the level which would have otherwise occurred cannot be accomplished without imposing a significant burden of additional inflation. Only sweeping changes in institutional structure or drastic increases in productivity gains would alter this conclusion and, as previously mentioned, this is not likely to be accomplished by investment to meet pollution control standards.

Table III.5

Effects on Selected Macroeconomic Variables for 150% of Median Change in Pollution Control Costs

Full Employment Case

	1972	1973	1974	1975	1976	1977	1978	1979	1980
Gross National Product, current dollars									
Baseline projection	1147.7	1267.4	1374.9	1480.3	1611.9	1747.3	1886.0	2033.0	2187.2
With pollution control costs	1153.9	1274.3	1384.3	1488.5	1613.6	1745.8	1884.1	2027.5	2175.3
Difference	6.2	6.9	9.4	8.2	1.7	-1.5	-1.9	-5.5	-11.9
With offsetting government policy	1153.9	1274.3	1391.0	1517.2	1659.4	1804.3	1953.8	2110.0	2276.5
Difference (from baseline)	6.2	6.9	16.1	36.9	47.5	57.0	67.8	77.0	89.3
Gross National Product, constant dollars									
Baseline projection	786.4	836.6	875.7	907.8	954.3	997.3	1038.8	1083.6	1131.5
With pollution control costs	789.5	835.8	870.1	893.9	933.5	978.1	1025.2	1073.1	1122.4
Difference	3.1	-.8	-5.6	-13.9	-20.8	-19.2	-13.6	-10.5	-9.1
With offsetting government policy	789.5	835.8	873.8	909.0	954.9	998.9	1041.6	1085.2	1131.6
Difference (from baseline)	(not calculated)								
Implicit GNP Deflator, 1958=100.0									
Baseline projection	145.9	151.5	157.0	163.0	168.9	175.2	181.5	187.6	193.3
With pollution control costs	146.1	152.5	159.1	166.5	172.8	178.5	183.8	188.9	193.8
Difference	.2	1.0	2.1	3.5	3.9	3.3	2.3	1.3	.5
With offsetting government policy	146.1	152.5	159.2	166.9	173.7	180.6	187.6	194.4	201.1
Difference (from baseline)	.2	1.0	2.2	3.9	4.8	5.4	6.1	6.8	7.8
Consumer Price Index, 1967=100.0									
Baseline projection	124.8	129.9	135.6	141.7	147.4	153.5	159.6	165.3	170.6
With pollution control costs	125.1	131.0	137.7	144.5	149.8	154.7	159.4	163.9	168.3
Difference	.3	1.1	2.1	2.8	2.4	1.2	-.2	-1.4	-2.3
With offsetting government policy	125.1	131.0	137.7	144.7	150.9	157.4	164.1	170.6	177.1
Difference (from baseline)	.3	1.1	2.1	3.0	3.5	3.9	4.5	5.3	6.5
Wholesale Price Index, 1967=100.0									
Baseline projection	116.1	117.9	119.8	122.3	124.5	126.5	128.3	129.5	130.4
With pollution control costs	116.5	119.1	122.4	126.8	129.8	131.6	133.0	134.0	134.8
Difference	.4	1.2	2.6	4.5	5.3	5.1	4.7	4.5	4.4
With offsetting	116.5	119.1	122.4	126.9	130.1	132.4	134.5	136.2	137.7
Difference (from baseline)	.4	1.2	2.6	4.6	5.6	5.9	6.2	6.7	7.3

Table III.5 (Cont'd.)

	1972	1973	1974	1975	1976	1977	1978	1979	1980
Net Foreign Balance									
Baseline projection	3.5	3.5	1.6	1.0	0.2	-1.1	-1.1	0.7	3.3
With pollution control costs	2.6	2.2	-.7	-1.7	-1.1	-1.0	-.7	1.2	3.7
Difference	-.9	-1.3	-2.3	-2.7	-1.3	.1	.4	.5	.4
With offsetting government policy	2.6	2.2	-.7	-2.6	-3.2	-4.6	-5.0	-3.5	-1.2
Difference (from baseline)	-.9	-1.3	-2.3	-3.6	-3.4	-3.5	-3.9	-4.2	-4.5
Unemployment Rate, percent									
Baseline projection	5.41	4.93	4.70	4.73	4.38	4.37	4.44	4.44	4.47
With pollution control costs	5.35	5.03	4.92	5.06	4.69	4.69	4.70	4.68	4.68
Difference	-.6	.10	.22	.33	.31	.32	.26	.24	.21
With offsetting government policy	5.35	5.03	4.85	4.81	4.38	4.38	4.43	4.39	4.40
Difference (from baseline)	(not calculated)								
Fixed Business Investment, constant dollars									
Baseline projection	83.6	93.0	101.4	105.7	112.4	118.3	123.3	129.2	135.1
With pollution control costs	115.1	122.3	127.5	130.3	134.4	141.0	149.2	157.3	165.1
Difference	31.5	29.3	26.1	24.6	22.0	22.7	25.9	28.1	30.0
With offsetting government policy	115.1	122.3	127.7	131.7	135.9	141.8	148.4	154.8	161.3
Difference (from baseline)	31.5	29.3	26.3	26.0	23.5	23.5	25.1	25.6	26.2
Housing Starts, million									
Baseline projection	2.09	1.95	1.71	1.76	1.87	1.99	2.12	2.21	2.35
With pollution control costs	2.06	1.84	1.50	1.56	1.75	2.03	2.27	2.37	2.45
Difference	-.03	-.11	-.21	-.20	-.12	.04	.15	.16	.10
With offsetting government policy	2.06	1.84	1.49	1.49	1.60	1.84	2.02	2.05	2.09
Percentage Growth Rate of GNP, constant dollars									
Baseline projection	5.98	6.38	4.68	3.67	5.12	4.51	4.16	4.31	4.42
With pollution control costs	6.39	5.86	4.11	2.73	4.43	4.78	4.81	4.68	4.59
Difference	.41	-.52	-.57	-.94	-.69	.27	.65	.37	.17
With offsetting government policy	6.39	5.86	4.55	4.03	5.04	4.61	4.28	4.19	4.28
Difference (from Baseline)	(not calculated)								
Percentage Growth Rate of Consumer Price Index									
Baseline projection	2.97	4.13	4.39	4.48	3.98	4.17	3.96	3.56	3.21
With pollution control costs	3.27	4.67	5.15	4.94	3.62	3.28	3.05	2.83	2.64
Difference	.3	.54	.76	.46	-.36	-.89	-.91	-.73	-.57
With offsetting government policy	3.27	4.67	5.15	5.09	4.22	4.32	4.24	3.99	3.79
Difference (from baseline)	.3	.54	.76	.61	.24	.15	.28	.43	.58

Table III.6

Changes in Exogenous Variables for Offset Run--150% of Median Change

Full Employment Case

	1972	1973	1974	1975	1976	1977	1978	1979	1980
Unborrowed Reserves									
Baseline	33.3	35.7	39.2	43.3	47.3	51.6	56.0	60.5	64.8
Offset	33.3	35.7	39.2	43.3	47.32	52.02	57.02	62.02	67.02
Government Employment									
Baseline	13.18	13.55	14.02	14.62	15.22	16.00	16.68	17.40	18.20
Offset	13.18	13.55	14.07	14.75	15.38	16.14	16.82	17.55	18.35
Federal Government Non-Defense Purchases of Goods and Services									
Baseline	26.1	29.9	33.1	35.9	38.7	41.5	45.1	49.9	55.0
Offset	26.0	29.8	33.0	35.8	38.6	42.3	47.8	53.3	59.1
State and Local Government Purchases									
Baseline	150.2	166.2	183.1	202.6	223.7	246.9	272.1	301.0	332.2
Offset	150.2	166.2	187.9	216.8	238.6	261.9	287.1	315.9	348.7
Other Federal Transfer Payments									
Baseline	21.5	28.8	33.0	35.5	39.5	43.5	47.5	54.0	62.0
Offset	21.5	28.7	35.2	44.9	58.2	63.0	67.0	73.5	81.5

All figures are in billion of current dollars except government employment, in millions.

Table III. 7

Effects on Selected Macroeconomic Variables for 150% of Median Change in Pollution Control Costs

Recession Case

	1972	1973	1974	1975	1976	1977	1978	1979	1980
Gross National product, current dollars									
Baseline projection	1146.8	1243.5	1325.2	1423.3	1543.8	1673.5	1806.2	1944.7	2085.7
With pollution control costs	1153.0	1250.2	1336.1	1438.5	1556.5	1684.6	1815.6	1947.7	2081.5
Difference	6.2	6.7	10.9	15.2	12.7	11.1	9.4	3.0	-4.2
With offsetting government policy	1153.0	1250.2	1341.8	1461.2	1593.4	1729.1	1863.6	2003.6	2152.1
Difference (from baseline)	6.2	6.7	16.6	37.9	49.6	44.5	57.4	58.9	66.4
Gross National product, constant dollars									
Baseline projection	785.9	821.0	848.5	889.9	946.7	1002.5	1053.1	1102.0	1149.0
With pollution control costs	788.9	820.2	843.9	879.0	927.7	981.7	1033.9	1083.0	1131.1
Difference	3.0	-0.8	-4.6	-10.9	-19.0	-20.8	-19.2	-19.0	-17.9
With offsetting government policy	788.9	820.2	847.0	891.7	947.9	1002.3	1051.3	1099.2	1147.6
Difference (from baseline)	(not calculated)								
Implicit GNP deflator, 1958 = 100.0									
Baseline projection	145.9	151.4	156.2	159.9	163.1	166.9	171.5	176.5	181.5
With pollution control costs	146.1	152.4	158.3	163.6	167.8	171.6	175.6	179.8	184.0
Difference	0.2	1.0	2.1	3.7	4.7	4.7	4.1	3.3	2.5
With offsetting government policy	146.1	152.4	158.4	163.8	168.1	172.5	177.2	182.3	187.5
Difference (from baseline)	0.2	1.0	2.2	3.9	5.0	5.6	5.7	5.8	6.0
Consumer Price Index, 1967 = 100.0									
Baseline projection	124.8	129.8	134.3	137.6	140.2	143.8	148.0	152.6	157.2
With pollution control costs	125.1	130.9	136.4	140.8	143.7	146.7	150.1	153.7	157.3
Difference	0.3	1.1	2.1	3.2	3.5	2.9	2.1	1.1	0.1
With offsetting government policy	125.1	130.9	136.4	140.7	143.8	147.5	151.7	156.2	160.9
Difference (from baseline)	0.3	1.1	2.1	3.1	3.6	3.7	3.7	3.6	3.7
Wholesale Price Index, 1967 = 100. 0									
Baseline Projection	116.1	117.7	119.3	120.8	121.6	122.6	123.9	124.9	125.9
With pollution control costs	116.5	118.9	121.9	125.4	127.2	128.2	129.2	130.0	130.6
Difference	0.4	1.2	2.6	4.6	5.6	5.6	5.3	5.1	4.7
With offsetting government policy	116.5	118.9	121.9	125.5	127.3	128.5	129.8	131.0	132.1
Difference (from baseline)	0.4	1.2	2.6	4.7	5.7	5.9	5.9	6.1	6.2

Table III.7 (Cont'd).

	1972	1973	1974	1975	1976	1977	1978	1979	1980
Net Foreign Balance									
Baseline projection	3.5	4.5	5.3	6.2	6.7	5.5	4.9	5.8	7.7
With pollution control costs	2.6	3.2	2.9	3.0	4.5	4.6	4.6	6.1	8.4
Difference	-0.9	-1.3	-2.4	-3.2	-2.2	-0.9	-0.3	0.3	0.7
With offsetting government policy	2.6	3.2	2.9	2.5	2.9	2.1	2.1	3.3	5.3
Difference (from baseline)	-0.9	-1.3	-2.4	-3.7	-3.8	-3.4	-2.8	-2.5	-2.4
Unemployment Rate, percent									
Baseline projection	5.41	5.65	6.16	6.04	5.59	5.48	5.45	5.41	5.44
With pollution control costs	5.34	5.75	6.24	6.24	5.78	5.72	5.71	5.65	5.65
Difference	-0.07	0.10	0.08	0.20	0.19	0.24	0.26	0.24	0.21
With offsetting government policy	5.34	5.75	6.25	6.08	5.54	5.50	5.45	5.40	5.42
Difference (from baseline)	(not calculated)								
Fixed Business Investment, constant dollars									
Baseline projection	112.1	117.4	120.0	127.1	137.2	148.4	156.7	164.2	171.0
With pollution control costs	114.6	119.2	122.8	128.9	135.2	144.8	154.2	162.2	169.4
Difference	2.5	1.8	2.8	1.8	-2.0	-3.6	-2.5	-2.0	-1.6
With offsetting government policy	114.6	119.2	123.1	131.0	138.7	148.0	156.1	163.3	170.3
Difference (from baseline)	2.5	1.8	3.1	3.9	1.5	-0.4	-0.6	-0.9	-0.7
Housing starts, millions									
Baseline projection	2.03	1.86	1.77	1.90	2.20	2.45	2.54	2.52	2.54
With pollution control costs	1.99	1.77	1.59	1.68	2.04	2.41	2.59	2.60	2.61
Difference	-0.04	-0.09	-0.18	-0.22	-0.16	-0.04	0.05	0.08	0.07
With offsetting government policy	1.99	1.77	1.61	1.73	2.08	2.38	2.48	2.43	2.45
Difference (from baseline)	-0.04	-0.09	-0.16	-0.17	-0.12	-0.07	-0.06	-0.09	-0.09
Percentage growth rate of GNP, constant dollars									
Baseline projection	5.91	4.47	3.35	4.88	6.38	5.90	5.04	4.65	4.27
With pollution control costs	6.32	3.96	2.90	4.16	5.53	5.82	5.32	4.75	4.44
Difference	0.41	-0.51	-0.45	-0.72	-0.85	-0.08	0.28	0.10	0.17
With offsetting government policy	6.32	3.96	3.27	5.28	6.30	5.74	4.89	4.55	4.40
Difference (from baseline)	(not calculated)								
Percentage growth rate of consumer price index									
Baseline projection	2.97	4.06	3.42	2.45	1.89	2.56	2.96	3.09	3.04
With pollution control costs	3.27	4.61	4.21	3.18	2.06	2.14	2.32	2.38	2.30
Difference	0.30	0.55	0.79	0.73	0.17	-0.42	-0.64	-0.71	-0.74
With offsetting government policy	3.27	4.61	4.21	3.17	2.21	2.56	2.83	2.98	2.99
Difference (from baseline)	0.30	0.55	0.79	0.72	0.32	0.00	-0.13	-0.11	-0.05

Table III.8

Changes in Exogenous Variables for Offset Run -- 150% of Median Change

Recession Case

	1972	1973	1974	1975	1976	1977	1978	1979	1980
Unborrowed Reserves									
Baseline	33.3	35.55	38.07	41.65	45.50	49.50	53.50	57.50	61.50
Offset	33.3	35.55	38.32	42.47	46.96	51.36	55.97	60.57	65.17
Government Employment									
Baseline	13.18	13.55	14.02	14.62	15.23	15.99	16.67	17.40	18.20
Offset	13.18	13.55	14.07	14.75	15.38	16.14	16.82	17.55	18.35
Federal Government Non-defense Purchases of Goods and Services									
Baseline	26.0	29.8	33.0	35.8	38.6	41.4	45.1	49.9	55.0
Offset	26.0	29.8	33.0	35.8	38.6	47.6	54.8	58.8	62.1
State and Local Government Purchases									
Baseline	150.2	166.2	183.4	202.6	233.6	246.9	272.1	300.9	330.7
Offset	150.2	166.2	187.9	213.8	235.6	258.9	283.8	312.9	347.9
Other Federal Transfer Payments									
Baseline	21.5	26.2	32.5	36.5	40.5	44.5	48.5	52.5	56.5
Offset	21.5	26.2	33.6	44.4	52.5	53.1	56.0	60.0	66.2

All figures are in billions of current dollars except government employment, in millions.

Table III.9

Effects on Selected Macroeconomic Variables for 75% of Median Change in Pollution Control Costs

Full Employment Case

	1972	1973	1974	1975	1976	1977	1978	1979	1980
Gross National Product, current dollars									
Baseline projection	1147.7	1267.4	1374.9	1480.3	1611.9	1747.3	1886.0	2033.0	2187.2
With pollution control cost	1150.7	1270.0	1379.2	1484.3	1613.3	1749.1	1890.3	2038.6	2192.3
Difference	3.0	2.6	4.3	4.0	1.4	1.8	4.3	5.6	5.1
With offsetting government policy	1150.7	1270.0	1382.3	1497.9	1635.3	1776.5	1919.7	2069.1	2227.3
Difference (from baseline)	3.0	2.6	7.4	17.6	23.4	29.2	33.7	36.1	40.1
Gross National Product, constant dollars									
Baseline projection	786.4	836.6	875.7	907.8	954.3	997.3	1038.8	1083.6	1131.5
With pollution control costs	787.9	835.7	873.0	901.4	944.6	988.7	1032.8	1078.6	1126.3
Difference	1.5	-.9	-2.7	-6.4	-9.7	-8.6	-6.0	-5.0	-5.2
With offsetting government policy	787.9	835.7	874.7	908.7	955.5	999.6	1040.7	1084.0	1131.6
Difference (from baseline)	(not calculated)								
Implicit GNP Deflator, 1958=100.0									
Baseline projection	145.9	151.5	157.0	163.0	168.9	175.2	181.5	187.6	193.3
With pollution control costs	146.0	151.9	158.0	164.7	170.8	176.9	183.0	189.0	194.6
Difference	.1	.4	1.0	1.7	1.9	1.7	1.5	1.4	1.3
With offsetting government policy	146.0	151.9	158.0	164.8	171.1	177.2	184.4	190.9	196.8
Difference (from baseline)	.1	.4	1.0	1.8	2.2	2.5	2.9	3.3	3.5
Consumer Price Index, 1967=100.0									
Baseline projection	124.8	129.9	135.6	141.7	147.4	153.5	159.6	165.3	170.6
With pollution control cost	125.0	130.4	136.6	143.0	148.4	154.2	159.9	165.5	170.7
Difference	.2	.5	1.0	1.3	1.0	.7	.3	.2	.1
With offsetting government policy	125.0	130.4	136.6	143.0	148.8	155.2	161.7	167.7	173.2
Difference (from baseline)	.2	.5	1.0	1.3	1.4	1.7	2.1	2.4	2.6
Wholesale Price Index, 1967=100.0									
Baseline projection	116.1	117.9	119.8	122.3	124.5	126.5	128.3	129.5	130.4
With pollution control costs	116.3	118.5	121.1	124.5	127.1	129.1	130.9	132.2	133.3
Difference	.2	.6	1.3	2.2	2.6	2.6	2.6	2.7	2.9
With offsetting government policy	116.3	118.5	121.1	124.5	127.2	129.4	131.4	133.0	134.1
Difference (from baseline)	.2	.6	1.3	2.2	2.7	2.9	3.1	3.5	3.7

Table III.9 (Cont'd)

	1972	1973	1974	1975	1976	1977	1978	1979	1980
Net Foreign Balance (Net exports of Goods & Services)									
Baseline projection	3.5	3.4	1.6	1.0	0.2	-1.1	-1.1	0.7	3.3
With pollution control cost	3.1	2.9	.6	-.3	-.4	-1.2	-1.2	.5	3.0
Difference	-.4	-.6	-1.0	-1.3	-.6	-.1	-.1	-.2	-.3
With offsetting government policy	3.1	2.9	.5	-.7	-1.4	-2.8	-3.1	-1.3	1.3
Difference (from baseline)	-.4	-.6	-1.1	-1.7	-1.6	-1.7	-2.0	-2.0	-2.0
Unemployment Rate, percent									
Baseline projection	5.41	4.93	4.70	4.73	4.38	4.37	4.44	4.44	4.47
With pollution control costs	5.41	4.99	4.80	4.89	4.48	4.50	4.55	4.54	4.57
Difference	0	.06	.10	.16	.10	.13	.11	.10	.10
With offsetting government policy	5.41	4.99	4.79	4.80	4.35	4.41	4.53	4.54	4.57
Difference (from baseline)	(not calculated)								
Fixed Business Investment, constant dollars									
Baseline projection	83.6	93.0	101.4	105.7	112.4	118.3	123.3	129.2	135.1
With pollution control costs	113.8	121.4	126.6	129.8	135.6	142.3	149.3	156.6	164.0
Difference	30.2	28.4	25.2	24.1	23.2	24.0	26.0	27.4	28.9
With offsetting government policy	113.8	121.4	126.2	120.2	136.2	143.1	149.2	155.8	163.0
Difference (from baseline)	30.2	28.4	25.3	25.0	24.3	24.8	25.9	26.6	27.9
Housing Starts, millions									
Baseline projection	20.9	1.95	1.71	1.76	1.87	1.99	2.12	2.21	2.35
With pollution control costs	2.07	1.90	1.63	1.68	1.82	2.01	2.18	2.26	2.36
Difference	-.12	-.05	-.08	-.08	.05	.02	.06	.05	.01
With offsetting government policy	2.07	1.90	1.63	1.66	1.78	1.94	2.08	2.14	2.26
Difference (from baseline)	-.02	-.05	-.08	-.10	-.09	-.05	-.04	-.07	-.09
Percentage Growth Rate of GNP, constant dollars									
Baseline projection	5.98	6.38	4.68	3.67	5.12	4.51	4.16	4.31	4.42
With pollution control costs	6.18	6.07	4.46	3.25	4.79	4.67	4.47	4.44	4.42
Difference	.20	-.31	-.22	-.42	-.33	.16	.31	.13	0
With offsetting government policy	6.18	6.07	4.66	3.89	5.15	4.61	4.12	4.16	4.39
Difference (from baseline)	(not calculated)								
Percentage Growth Rate of Consumer Price Index									
Baseline projection	2.97	4.13	4.39	4.48	3.98	4.17	3.96	3.56	3.21
With pollution control costs	3.12	4.37	4.71	4.68	3.83	3.87	3.73	3.45	3.16
Difference	.15	.24	.32	.20	-.15	-.30	-.23	-.11	-.05
With offsetting government policy	3.12	4.37	4.71	4.72	4.05	4.30	4.16	3.73	3.30
Difference (from baseline)	.5	.24	.32	.24	.07	.13	.20	.17	.09

N.B. The "difference" for constant-dollar GNP and the unemployment rate has not been calculated for the simulation with offsetting government policy, since that run was designed to duplicate the baseline projection for those two variables.

Table III.10

Changes In Exogenous Variables for Offset Run -- 75% of Median Change

Full Employment Case

	1972	1973	1974	1975	1976	1977	1978	1979	1980
Unborrowed Reserves									
Baseline	33.3	35.7	39.2	43.3	47.3	51.6	56.0	60.5	64.8
Offset	33.3	35.7	39.2	43.3	47.32	51.84	56.54	61.24	65.94
Government Employment									
Baseline	13.18	13.55	14.02	14.62	15.22	16.00	16.68	13.40	18.20
Offset	13.18	13.55	14.02	14.62	15.23	15.99	16.67	17.40	18.20
Federal Government Non-Defense Purchases of Goods and Services									
Baseline	26.1	29.9	33.1	35.9	38.7	41.5	45.1	49.9	55.0
Offset	26.0	29.8	33.0	35.8	38.6	42.0	46.5	51.6	57.1
State and Local Government Purchases									
Baseline	150.2	166.2	183.1	202.6	223.7	246.9	272.1	301.0	332.2
Offset	150.2	166.2	185.2	209.7	231.1	254.4	279.6	308.4	339.7
Other Federal Transfer Payments									
Baseline	21.5	28.8	33.0	35.5	39.5	43.5	47.5	54.0	62.0
Offset	21.5	28.7	34.1	40.2	48.9	53.2	57.2	63.7	71.7

All figures are in billion of current dollars except government employment, in millions.

Table III.11

Effects on Selected Macroeconomic Variables for 125% of Median Change in Pollution Control Costs

Full Employment Case

	1972	1973	1974	1975	1976	1977	1978	1979	1980
Gross National Product, current dollars									
Baseline projection	1147.7	1267.4	1374.9	1480.3	1611.9	1747.3	1886.	2033.0	2187.2
With pollution control costs	1152.4	1272.8	1381.8	1486.2	1613.2	1746.7	1885.7	2030.4	2180.5
Difference	4.7	5.4	6.9	5.9	1.3	-.6	-.3	-2.6	-6.7
With offsetting government policy	1152.4	1272.8	1387.5	1509.5	1650.1	1794.0	1941.5	2096.2	2260.6
Difference (from baseline)	4.7	5.4	12.5	29.2	38.2	46.2	55.5	63.2	73.4
Gross National Product, constant dollars									
Baseline projection	786.4	836.6	875.7	907.8	954.3	997.3	1038.8	1083.6	1131.5
With pollution control costs	788.6	835.8	876.8	986.4	937.9	982.3	1028.0	1074.9	1123.7
Difference	2.2	-.8	-4.9	-11.4	16.4	-15.0	-10.8	-8.7	-7.8
With offsetting policy	(not calculated)								
Implicit GNP Deflator, 1958=100.0									
Baseline projection	145.9	151.5	157.0	163.0	168.9	175.2	181.5	187.6	193.3
With pollution control costs	146.1	152.3	158.7	165.8	172.0	177.8	183.4	188.9	194.0
Difference	.2	.8	1.7	2.8	3.1	2.6	1.9	1.3	.7
With offsetting government policy	146.1	152.3	158.7	166.1	172.7	179.3	186.2	193.0	199.9
Difference (from baseline)	0.2	.8	1.7	3.1	3.8	4.1	4.7	5.4	6.3
Consumer Price Index, 1967=100.0									
Baseline projection	124.8	129.9	135.6	141.7	147.4	153.5	159.6	165.3	170.6
With pollution control costs	125.1	130.8	137.3	143.9	149.1	154.4	159.5	164.4	169.0
Difference	.3	.9	1.7	2.2	1.7	.9	-.1	-.9	-1.6
With offsetting government policy	125.1	130.8	137.3	144.8	149.9	156.2	162.9	169.4	175.7
Difference (from baseline)	.3	.9	1.7	2.3	2.5	2.8	3.3	4.1	5.1
Wholesale Price Index, 1967=100.0									
Baseline projection	116.1	117.9	119.8	122.3	124.5	126.5	128.3	129.5	130.4
With pollution control costs	116.4	118.9	121.9	126.0	128.8	130.7	132.2	133.4	134.3
Difference	.3	1.0	2.1	3.7	4.3	4.2	3.9	3.9	3.9
With offsetting government policy	116.4	118.9	127.9	126.0	129.0	131.2	133.3	135.0	136.5
Difference (from baseline)	.3	1.0	2.1	3.7	4.5	4.7	5.0	5.5	6.1
Net Foreign Balance									
Baseline projection	3.5	3.5	1.6	1.0	0.2	-1.1	-1.1	0.7	3.3
With pollution control costs	2.8	2.5	-.2	-1.2	-.8	-1.1	-.9	1.0	3.5
Difference	-.7	-1.0	-1.8	-2.2	-1.0	0	.2	.3	.2
With offsetting government policy	2.8	2.5	-.3	-1.8	-2.5	-3.9	-4.3	-2.8	-.5
Difference (from baseline)	-.7	-1.0	-1.9	-2.8	-2.7	-2.8	-3.2	-3.5	-3.8

Table III.11 (cont'd.)

	1972	1973	1974	1975	1976	1977	1978	1979	1980
Unemployment Rate, percent									
Baseline projection	5.41	4.93	4.70	4.73	4.38	4.37	4.44	4.44	4.47
With pollution control costs	5.38	5.03	4.90	4.99	4.60	4.61	4.65	4.63	4.65
Difference	-.03	.10	.20	.26	.22	.24	.21	.19	.18
With offsetting government policy	5.38	5.03	4.86	4.82	4.37	4.37	4.43	4.41	4.43
Difference (from baseline)	(not calculated)								
Fixed Business Investment, constant dollars									
Baseline projection	83.6	93.0	101.4	105.7	112.4	118.3	123.3	129.2	135.1
With pollution control costs	114.4	122.0	127.3	130.2	135.0	141.6	149.3	157.0	164.7
Difference	30.8	29.0	25.9	24.5	22.6	23.3	26.0	27.8	29.6
With offsetting government policy	114.4	122.0	127.5	131.5	136.5	142.6	149.0	155.3	162.0
Difference (from baseline)	30.8	29.0	26.1	25.8	24.1	24.3	25.7	26.1	26.9
Housing Starts, Millions									
Baseline Projectin	2.09	1.95	1.71	1.76	1.87	1.99	2.12	2.21	2.35
With pollution control costs	2.07	1.86	1.55	1.61	1.78	2.03	2.23	2.33	2.42
Difference	-.02	-.09	-.16	-.15	-.09	.04	.11	.12	.07
With offsetting government policy	2.07	1.86	1.55	1.57	1.68	1.89	2.04	2.08	2.14
Difference (from baseline)	-.02	-.09	-.16	-.19	-.19	-.10	-.08	-.13	-.21
Percentage Growth Rate of GNP, constant dollars									
Baseline projection	5.98	6.38	4.68	3.67	5.12	4.51	4.16	4.31	4.42
With pollution control costs	6.28	5.99	4.19	2.94	4.62	4.74	4.65	4.56	4.54
Difference	.30	-.39	-.49	-.73	-.5	.23	.49	.25	.12
With offsetting government policy	6.28	5.99	4.56	3.99	5.15	4.67	4.24	4.17	4.27
Difference (from baseline)	(not calculated)								
Percentage Growth Rate of Consumer Price Index									
Baseline projection	2.97	4.13	4.39	4.48	3.98	4.17	3.96	3.56	3.21
With pollution control costs	3.22	4.56	4.98	4.79	3.66	3.51	3.32	3.06	2.82
Difference	.25	.43	.59	.31	-.32	-.66	-.64	.5	-.39
With offsetting government policy	3.22	4.56	4.98	4.90	4.08	4.27	4.23	3.98	3.73
Difference (from baseline)	.25	.43	.59	.42	.10	.10	.27	.42	.52

Table III.12

Changes in Exogenous Variables for Offset Run -- 125% of Median Change

Full Employment Case

	1972	1973	1974	1975	1976	1977	1978	1979	1980
Unborrowed Reserves									
Baseline	33.3	35.7	39.2	43.3	47.3	51.6	56.0	60.5	64.0
Offset	33.3	35.7	39.2	43.3	47.32	51.96	56.86	61.76	66.66
Government Employment									
Baseline	13.18	13.55	14.02	14.62	15.22	16.00	16.68	17.40	18.20
Offset	13.18	13.55	14.06	14.73	15.35	16.12	16.80	17.52	18.32
Federal Government Non-Defense Purchases of Goods and Services									
Baseline	26.1	29.9	33.1	35.9	38.7	41.5	45.1	49.9	55.0
Offset	26.0	29.8	33.0	35.8	38.6	42.4	47.4	52.7	58.4
State and Local Government Purchases									
Baseline	150.2	166.2	183.1	202.6	223.7	246.9	272.1	301.0	332.2
Offset	150.2	166.2	187.1	214.4	236.1	259.4	284.6	313.4	345.7
Other Federal Transfer Payments									
Baseline	21.5	28.8	33.0	35.5	39.5	43.5	47.5	54.0	62.0
Offset	21.5	28.7	34.9	43.3	55.1	59.7	63.7	70.2	78.2

Table III.13

Effects on Selected Macroeconomic Variables for 75% of Median Change in Pollution Control Costs

Recession Case

	1972	1973	1974	1975	1976	1977	1978	1979	1980
Gross National Product, current dollars									
Baseline projection	1146.8	1243.5	1325.2	1423.3	1543.8	1673.5	1806.2	1944.7	2085.7
With pollution control costs	1149.9	1246.0	1328.6	1427.3	1545.7	1674.6	1805.2	1938.7	2075.5
Difference	3.1	2.5	3.4	4.0	1.9	1.1	-1.0	-6.0	-10.2
With offsetting government policy	149.9	1246.0	1331.4	1438.0	1561.1	1689.3	1820.9	1957.6	2095.2
Difference (from baseline)	3.1	2.5	6.2	14.7	17.3	15.8	14.7	12.9	9.5
Gross National Product, constant dollars									
Baseline projection	785.9	821.0	848.5	889.9	946.7	1002.5	1053.1	11.2.0	1149.0
With pollution control costs	787.4	820.1	845.3	883.5	937.0	993.5	1045.5	1094.3	1142.6
Difference	1.5	-.9	-3.2	-6.4	-9.7	-9.0	-7.6	-7.7	-6.4
With offsetting government policy	787.5	820.1	846.9	889.6	945.8	1001.3	1053.0	1102.3	1147.9
Difference (from baseline)	(not calculated)								
Implicit GNP Deflator, 1958=100.0									
Baseline projection	145.9	151.4	156.2	159.9	163.1	166.9	171.5	176.5	181.5
With pollution control cost	146.0	151.9	157.7	161.5	164.9	168.5	172.7	177.1	181.6
Difference	.1	.5	1.0		1.8	1.6	1.2	.6	.1
With offsetting government policy	146.0	151.9	157.2	161.6	165.0	168.7	172.9	177.6	182.5
Difference (from baseline)	.1	.5	1.0	1.7	1.9	1.8	1.4	1.1	1.0
Consumer Price Index, 1967=100.0									
Baseline projection	124.8	129.8	134.3	137.6	140.2	143.8	148.0	152.6	157.2
With pollution control costs	125.0	130.3	135.2	138.9	141.3	144.4	148.0	152.0	155.9
Difference	.2	.5	.9		1.1	.6	0	-.6	-1.3
With offsetting government policy	125.0	130.3	135.2	1.2	1.1	.6	.2	-.2	-.3
Difference (from baseline)	.2	.5	.9	1.2	1.1	.6	.2	-.2	
Wholesale Price Index,1967=100.0									
Baseline projection	116.1	117.7	119.3	120.8	121.6	122.6	123.9	124.9	125.9
With pollution control costs	116.3	118.3	120.6	125.0	124.7	125.1	126.1	127.0	127.8
Difference	.2	.6	1.3	2.2	2.6	2.5	2.2	2.1	1.9
With offsetting government policy	116.3	118.3	120.5	123.0	124.2	125.1	126.1	127.1	128.0
Difference (from baseline)	.2	.6	1.2	2.2	2.6	2.5	2.2	2.2	2.1

Table III.13 (Cont'd.)

	1972	1973	1974	1975	1976	1977	1978	1979	1980
Net Foreign Balance									
Baseline projection	3.5	4.5	5.3	6.2	6.7	5.5	4.9	5.8	7.7
With pollution control costs	3.1	3.9	4.3	4.9	6.0	5.5	5.1	6.3	8.3
Difference	-.4	-.6	-1.0	-1.3	-.7	0	.2	.5	.6
With offsetting government policy	3.1	3.9	4.3	4.7	5.3	4.6	4.3	5.2	7.2
Difference (from baseline)	-.4	-.6	-1.0	-1.5	-1.4	-.9	-.6	-.6	-.5
Unemployment Rate, percent									
Baseline projection	5.41	5.65	6.16	6.04	5.59	5.48	5.45	5.41	5.44
With pollution control costs	5.40	5.75	6.32	6.26	5.68	5.58	5.59	5.53	5.51
Difference	-.01	.10	.16	.22	.09	.10	.14	.12	.07
With offsetting government policy	5.40	5.75	6.33	6.25	5.68	5.52	5.45	5.40	5.48
Difference (from baseline)	(not calculated)								
Fixed Business Investment, constant dollars									
Baseline projection	112.1	117.4	120.0	127.1	137.2	148.4	156.7	164.2	171.0
With pollution control cases	113.3	118.3	121.4	128.1	136.5	147.2	156.3	164.0	171.1
Difference	1.2	.9	1.4	1.0	-.07	-1.2	-.4	-.2	.1
With offsetting government policy	113.3	118.3	121.5	129.2	138.1	148.7	157.5	165.3	171.4
Difference (from baseline)	1.2	.0	1.5	2.1	.9	.3	.8	1.1	.4
Housing Starts, million									
Baseline projection	2.03	1.86	1.77	1.90	2.20	2.45	2.54	2.52	2.54
With pollution control costs	2.01	1.82	1.70	1.82	2.16	2.47	2.61	2.60	2.61
Difference	-.02	-.04	-.07	-.08	-.04	.02	.07	.08	.07
With offsetting government policy	2.01	1.82	1.71	1.84	2.18	2.48	2.60	2.56	2.48
Difference (from baseline)	-.02	-.04	0.06	-.16	-.02	.03	.06	.04	-.06
Percentage Growth Rate of GNP, constant dollars									
Baseline projection	5.91	4.47	3.35	4.88	6.38	5.90	5.04	4.65	4.27
With pollution control costs	6.11	4.16	3.07	4.51	6.06	6.03	5.23	4.67	4.41
Difference	.20	-.31	-.28	-.37	-.32	.13	.19	.02	.14
With offsetting government policy	6.11	4.16	3.26	5.04	6.33	5.86	5.16	4.69	4.13
Difference (from baseline)	(not calculated)								
Percentage Growth Rate of Consumer Price Index									
Baseline projection	2.97	4.06	3.42	2.45	1.89	2.56	2.96	3.09	3.04
With pollution control costs	3.12	4.31	3.75	2.67	1.76	2.17	2.55	2.66	2.58
Difference	.15	.25	.33	.22	-.13	-.39	-.41	-.43	-.46
With offsetting government policy	3.12	4.31	3.75	2.67	1.80	2.20	2.59	2.85	2.94
Difference (from baseline)	.15	.25	.33	.22	-.09	-.36	-.37	-.24	-.10

Table III.14

Changes in Exogenous Variables for Offset Run -- 75% of Median Change Recession Case

	1972	1973	1974	1975	1976	1977	1978	1979	1980
Unborrowed Reserves									
Baseline	33.3	35.55	38.07	41.65	45.50	49.50	53.50	57.50	61.50
Offset	33.3	35.55	38.21	42.06	46.17	50.44	54.74	59.04	60.85
Government Employment									
Baseline	13.18	13.55	14.02	14.62	15.23	15.99	16.67	17.40	18.20
Offset	13.18	13.55	14.05	14.69	15.30	16.07	16.75	17.47	18.27
Federal Government Non-Defense Purchases of Goods and Services									
Baseline	26.0	29.8	33.0	35.8	38.6	41.4	45.1	49.9	55.0
Offset	26.0	29.8	33.0	35.8	38.6	42.0	46.5	49.7	52.3
State and Local Government Purchases									
Baseline	150.2	166.2	183.4	202.6	233.6	246.9	272.1	300.9	330.7
Offset	150.2	166.2	185.6	208.2	299.6	252.9	278.0	306.9	339.3
Other Federal Transfer Payments									
Baseline	21.5	26.2	-32.5	-36.5	40.5	44.5	48.5	52.5	56.5
Offset	21.5	26.2	33.1	40.4	46.5	48.8	52.2	56.3	16.4

All figures are in billion of current dollars except government employment, in millions.

Table III.15

Effects on Selected Macroeconomic Variables for 125% of Median Change in Pollution Control Costs Recession Case

	1972	1973	1974	1975	1976	1977	1978	1979	1980
Gross National Product, current dollars									
Baseline projection	1146.8	1243.5	1325.2	1423.3	1543.8	1673.5	1866.2	1944.7	2085.7
With pollution control costs	1152.0	1248.7	1333.5	1434.9	1553.1	1681.2	1811.9	1944.2	2079.3
Difference	5.2	5.2	8.3	11.6	9.3	7.7	5.7	-.5	-6.4
With offsetting government policy	1152.0	1248.7	1338.3	1455.0	1585.6	1716.5	1856.0	1998.6	2150.0
Difference (from baseline)	5.2	5.2	13.1	31.7	41.8	43.0	49.8	53.9	64.3
Gross National Product, constant dollars									
Baseline projection	785.9	821.0	848.5	889.9	946.7	1002.5	1053.1	1102.0	1149.0
With pollution control costs	788.4	820.1	844.4	880.7	930.9	985.5	1037.5	1086.5	1134.9
Difference	2.5	-.9	-4.1	-9.2	-15.8	-17.0	-15.6	-15.5	-14.1
With offsetting government policy	788.4	820.1	847.0	891.9	948.4	1000.5	1051.8	1100.0	1148.3
Difference (from baseline)	(not calculated)								
Implicit GNP Deflator, 1958=100.0									
Baseline projection	145.9	151.4	156.2	159.9	163.1	166.9	171.5	176.5	181.5
With pollution control costs	146.1	152.2	157.9	162.9	166.8	170.6	174.6	178.9	183.2
Difference	.2	.8	1.7	3.0	3.7	3.7	3.1	2.4	1.7
With offsetting government policy	146.1	152.2	158.0	163.1	167.2	171.5	176.4	181.7	187.2
Difference (from baseline)	.2	.8	1.8	3.2	4.1	4.6	4.9	5.2	5.7
Consumer Price Index, 1967=100.0									
Baseline projection	124.8	129.8	134.3	137.6	140.2	143.8	148.0	152.6	157.2
With pollution control costs	125.1	130.7	136.0	140.1	142.9	146.0	149.5	153.2	156.8
Difference	.3	.9	1.7	2.5	2.7	2.2	1.5	.6	-.4
With offsetting government policy	125.1	130.7	136.0	140.1	143.2	147.0	151.3	156.1	161.2
Difference (from baseline)	.3	.9	1.7	2.5	3.0	3.2	3.3	3.5	4.0
Wholesale Price Index									
Baseline projection	116.1	117.7	119.3	120.8	121.6	122.6	123.9	124.9	125.9
With pollution control costs	116.4	118.7	121.4	124.6	126.2	127.2	128.2	129.6	129.7
Difference	.3	1.0	2.1	3.8	4.6	4.6	4.3	4.1	3.8
With offsetting government policy	116.4	118.7	121.5	124.6	126.3	127.5	128.9	130.2	131.4
Difference (from baseline)	.3	1.0	2.2	3.8	4.7	4.9	5.0	5.3	5.5
Net Foreign Balance									
Baseline projection	3.5	4.5	5.3	6.2	6.7	5.5	4.9	5.8	7.7
With pollution control costs	2.8	3.5	3.4	3.7	5.0	4.9	4.8	6.2	8.4
Difference	-.7	-1.0	-1.9	-2.5	-1.7	-.6	-.1	.4	.7
With offsetting government policy	2.8	3.5	3.3	3.1	3.5	2.7	2.5	3.4	5.4
Difference (from baseline)	-.7	-1.0	-2.0	-3.1	-3.2	-2.8	-2.4	-2.4	-2.3

Table III.15 (Cont'd)

	1972	1973	1974	1975	1976	1977	1978	1979	1980
Unemployment Rate, percent									
Baseline projection	5.41	5.65	6.16	6.04	5.59	5.48	5.45	5.41	5.44
With pollution control costs	5.36	5.76	6.27	6.24	5.74	5.68	5.68	5.62	5.59
Difference	-.05	.11	.11	.20	.15	.20	.23	.21	.15
With offsetting government policy	5.36	5.76	6.25	6.03	5.50	5.42	5.39	5.30	5.32
Difference (from baseline)	(not calculated)								
Fixed Business Investment, constant dollars									
Baseline projection	112.1	117.4	120.0	127.1	137.2	148.4	156.7	164.2	171.0
With pollution control costs	114.2	118.9	122.4	128.7	135.7	145.6	154.8	162.7	170.0
Difference	2.1	1.5	2.4	1.6	-1.5	-2.8	-1.9	-1.5	-1.0
With offsetting government policy	114.2	118.9	122.6	130.5	138.5	147.8	156.1	163.3	169.9
Difference (from baseline)	2.1	1.5	2.6	3.4	2.8	-.6	-.6	-.9	-1.1
Housing Starts, millions									
Baseline projection	2.03	1.86	1.77	1.90	2.20	2.45	2.54	2.52	2.54
With pollution control costs	2.00	1.79	1.63	1.73	2.08	2.43	2.60	2.60	2.61
Difference	-.03	-.07	-.14	-.17	-.12	-.02	.06	.08	.07
With offsetting government policy	2.00	1.79	1.65	1.77	2.09	2.39	2.49	2.41	2.42
Difference (from baseline)	-.03	-.07	-.12	-.13	-.11	-.06	-.05	-.11	-.12
Percentage Growth Rate of GNP, constant dollar									
Baseline projection	5.91	4.47	3.35	4.88	6.38	5.90	5.04	4.65	4.27
With pollution control costs	6.25	4.02	2.96	4.29	5.71	5.86	5.27	4.72	4.45
Difference	.34	-.45	-.07	-.59	-.67	-.04	.23	.07	.18
With offsetting government policy	6.25	4.02	3.28	5.31	6.32	5.50	5.12	4.58	4.39
Difference (from baseline)	(not calculated)								
Percentage Growth Rate of Consumer Price Index									
Baseline projection	2.97	4.06	3.42	2.45	1.89	2.56	2.96	3.09	3.04
With pollution control costs	3.22	4.51	4.06	3.01	1.97	2.16	2.40	2.46	2.38
Difference	.25	.45	.64	.56	.08	-.40	-.56	-.63	-.66
With offsetting government policy	3.22	4.51	4.05	3.01	2.20	2.64	2.97	3.17	3.21
Difference (from baseline)	.25	.45	.63	.56	.31	.08	.01	.08	.17

N.B. The "difference" for constant-dollar GNP and the unemployment rate has not been calculated for the simulation with offsetting government policy, since that run was designed to duplicate the baseline projection for those two variables.

Table III.16

Changes in Exogenous Variables for Offset Run -- 125% of Median Change Recession Case

	1972	1973	1974	1975	1976	1977	1978	1979	1980
Unborrowed Reserves									
Baseline	33.3	35.55	38.07	41.65	45.50	49.50	53.50	57.50	61.50
Offset	33.3	35.55	38.29	42.34	46.62	51.06	55.60	59.95	64.40
Government Employment									
Baseline	13.18	13.55	14.02	14.62	15.23	15.99	16.67	17.40	18.20
Offset	13.18	13.55	14.06	14.73	15.35	16.12	16.80	17.52	18.32
Federal Government Non-Defense Purchases of Goods and Services									
Baseline	26.0	29.8	33.0	35.8	38.6	41.4	45.1	49.9	55.0
Offset	26.0	29.8	33.0	35.8	38.6	42.4	51.4	56.7	62.4
State and Local Government Purchases									
Baseline	150.2	166.2	183.4	202.6	233.6	246.9	272.1	300.9	330.7
Offset	150.2	166.2	187.1	211.9	233.6	256.9	281.8	310.9	345.1
Other Federal Transfer Payments									
Baseline	21.5	26.2	-32.5	-36.5	40.5	44.5	48.5	52.5	56.5
Offset	21.5	26.2	33.4	43.1	50.5	51.7	54.7	58.7	64.6

All figures are in billion of current dollars except government employment, in millions.

Conclusion

In this report we have shown that the additional costs incurred by implementing existing laws for pollution control standards will indeed have a significant effect on the U.S. economy. In particular, it is very difficult to escape the conclusion that either prices must rise by an additional 1/4% per year throughout the decade - with peak incremental differences of 1/2% in 1974 and 1975 - or the rate of unemployment must be as much as 1/4% higher during the decade. The U.S. has thus far in the postwar period been unable to resolve the problem of price stability at full employment, and there is no reason to expect that this problem will respond more favorably to the added costs of pollution controls than it has to the added costs of higher factor prices. In fact, insofar as investment to meet pollution control standards may be non-productive in the sense that it does not increase output, price increases might be more pronounced than in other cases.

On the other variable of major importance, namely the sharp decline in the net foreign balance, a variety of measures (tax or devaluation) could be adopted to reduce the decline in net exports.

There are, of course, a number of caveats which must be attached to these results. By the very nature of the macroeco-

nomic approach which we have used, this report does not consider the differential effects on specific regions or firms. Since we have used cost data for only 15 major industries, the cost estimates are understated by some unknown proportion. Furthermore, the cost data themselves are probably subject to serious reservations, a point which is technically beyond the scope of this report but should be considered as a distinct possibility. No assumption has been made about the productivity on pollution control investment except that it does not add or detract from output. This can be challenged for a number of industries. We have also had to make a number of critical assumptions about percentage pass-alongs at various stages of the analysis. However, in view of our much more detailed analysis on cost-price mark-ups for pollution control equipment in the auto industry, we believe that these mark-up estimates are fairly close.

THIS FORECAST WAS PREPARED BY CHASE ECONOMETRICS, INC. ON NOV 1971 AND IS THE 1ST FORECAST IN A SET OF 1 FORECASTS
THE PRINCIPLE ASSUMPTIONS FOR THIS RUN ARE FULL EMPLOYMENT BASELINE FOR CEQ MACRO

VARIABLE NAME	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	ANNUALIZED COMPOUND GROWTH RATES,-YEARS- 1-5	6-10	1-10
TABLE 1.1 -- GROSS NATIONAL PRODUCT IN CURRENT DOLLARS														
GROSS NATIONAL PRODUCT	974.1	1050.4	1147.7	1267.4	1374.9	1480.3	1611.9	1747.3	1886.0	2033.0	2187.2	8.96	7.93	8.48
CONSUMPTION EXPENDITURES	615.9	664.9	718.8	786.9	860.0	928.8	1007.8	1087.1	1169.1	1250.5	1334.3	8.71	7.29	8.04
DURABLE GOODS	104.7	101.3	108.1	117.6	127.8	136.7	149.6	160.8	170.4	181.0	191.2	7.78	6.33	7.31
NONDURABLE GOODS	264.7	288.6	303.4	328.8	353.7	374.1	398.0	422.1	445.7	468.9	492.8	7.45	5.49	6.45
SERVICES	262.5	283.0	307.4	340.5	378.5	418.0	459.4	505.0	553.0	600.6	650.2	10.24	9.07	9.67
GROSS PRIVATE INVESTMENT	136.6	152.3	175.2	201.6	215.5	220.4	255.5	282.4	306.6	333.0	361.8	10.67	9.09	10.08
FIXED INVESTMENT	133.8	149.1	165.7	185.9	201.3	217.5	242.4	267.3	292.1	318.6	346.6	9.98	9.35	9.81
NONRESIDENTIAL	109.3	107.6	119.1	138.7	157.7	172.9	193.4	213.2	232.4	253.3	273.7	12.59	9.07	10.92
STRUCTURES	36.0	38.5	42.7	51.5	59.3	66.6	76.3	86.2	96.7	108.6	120.4	14.66	12.09	13.49
EQUIPMENT	65.3	69.1	76.3	87.1	98.4	106.3	117.2	127.0	135.7	144.7	153.3	11.39	6.96	9.25
RESIDENTIAL STRUCTURES	31.7	41.5	46.6	47.3	43.6	44.6	49.0	54.1	59.8	65.3	72.8	1.82	10.42	6.43
NONFARM	31.1	41.0	46.0	46.6	42.9	43.9	48.2	53.4	58.9	64.5	71.9	1.77	10.51	6.45
CHANGE IN INVENTORIES	2.8	3.2	9.5	15.7	14.2	10.9	13.1	15.1	14.4	14.4	15.3	36.33	4.02	19.15
NET EXPORTS OF GOODS AND SERV	3.9	1.0	3.5	3.5	1.6	1.0	.2	-1.1	-1.1	.7	3.3	-2.02	103.10	13.73
EXPORTS	62.9	67.9	72.1	78.0	83.6	90.0	96.8	104.4	113.0	123.6	135.1	7.32	8.67	7.94
IMPORTS	59.0	66.8	68.6	74.5	82.0	89.1	96.6	105.6	114.1	122.9	131.9	7.44	8.06	7.83
GOVERNMENT PURCHASES	219.4	232.6	250.3	275.4	298.0	322.1	349.4	378.9	411.5	448.9	487.0	8.48	8.70	8.57
FEDERAL	97.2	96.0	100.1	109.2	114.6	119.5	125.7	132.0	139.4	148.0	157.1	5.39	5.73	5.52
NATIONAL DEFENSE	75.3	72.0	74.0	79.4	81.5	83.6	87.1	90.5	94.3	98.1	102.1	3.82	4.85	3.95
OTHER	21.9	24.0	26.0	29.0	33.0	35.0	38.6	41.4	45.1	49.9	55.0	9.59	9.23	9.22
STATE AND LOCAL	122.2	135.7	150.2	166.2	183.4	202.6	223.6	246.9	272.1	300.9	330.7	10.53	10.27	10.39
TABLE 1.2 -- OTHER MAJOR ECONOMIC INDICATORS														
MONEY SUPPLY WITHOUT TIME DEP	212.5	224.4	239.4	257.6	279.0	300.9	340.4	371.6	402.6	432.5	461.2	8.32	7.89	8.33
MONEY SUPPLY WITH TIME DEPOSIT	420.6	470.1	525.4	572.6	632.0	699.5	767.2	839.9	914.5	990.2	1066.9	9.98	8.59	9.32
TREASURY BILL RATE, 91-DAY	6.44	4.34	4.72	5.10	4.53	4.59	4.78	4.89	5.04	5.23	5.44	1.42	3.29	2.55
CORPORATE BOND RATE, NEW ISSUE	9.05	7.90	7.90	7.69	7.23	7.02	7.08	7.06	7.14	7.27	7.46	-2.91	1.32	-.63
INDEX OF INDUS PROD, TOTAL	100.5	100.7	110.0	122.4	129.0	133.1	141.0	148.7	155.0	162.1	169.6	5.49	4.57	5.20
INDEX OF INDUS PROD, MFG.	105.1	104.9	112.5	121.3	128.0	132.1	140.0	147.7	153.9	161.0	168.4	5.92	4.58	5.39
INDEX OF INDUS PROD, STEEL	100.0	96.2	101.9	117.3	122.7	123.9	129.6	135.6	146.0	152.1	161.2	6.53	5.61	5.98
INDEX OF CAPACITY UTILIZATION	82.7	81.0	85.6	89.6	91.5	91.2	92.7	93.0	92.9	93.1	93.5	2.76	.22	1.58
NEW PASSENGER CAR SALES,SAAR	0.44	10.33	11.19	11.04	12.36	12.70	13.30	13.56	13.83	14.17	14.46	5.30	2.11	3.81
TOTAL PRIVATE HOUSING STARTS	1.46	2.00	2.09	1.95	1.71	1.76	1.87	1.99	2.12	2.21	2.35	-3.11	5.00	1.79
GNP IN 1958 DOLLARS	720.0	742.0	786.4	830.6	875.7	907.0	954.3	997.3	1038.0	1083.6	1131.5	5.17	4.35	4.79
IMPLICIT GNP DEFLATOR	135.3	141.6	145.9	151.5	157.0	163.0	168.9	175.2	181.5	187.6	193.3	3.60	3.43	3.52
CONSUMER PRICE INDEX	116.3	121.2	124.0	129.9	135.6	141.7	147.4	153.5	159.6	165.3	170.6	3.99	3.73	3.87
WHSL PRICE INDEX (INDUS COMM)	110.0	114.0	116.1	117.9	119.0	122.3	124.5	126.5	128.3	129.5	130.4	1.77	1.10	1.58
PCT CHANGE IN GNP$ (ANN RATE)	6.70	7.03	9.27	10.43	8.40	7.66	8.09	8.40	7.94	7.80	7.50	-.53	-3.91	-.35
PCT CHANGE IN GNP58 (ANN RATE)	3.04	3.05	5.90	6.30	4.60	3.67	5.12	4.51	4.16	4.31	4.42	4.69	-3.50	4.19
PCT CHANGE IN GNP DEFLATOR	2.94	4.62	3.00	3.81	3.65	3.05	3.59	3.72	3.63	3.35	3.03	-4.45	-4.16	-4.50
PCT CHANGE IN CONS PRICE INDEX	4.30	4.19	2.97	4.13	4.39	4.40	3.90	4.17	3.96	3.56	3.21	1.70	-5.27	-2.91
DISPOSABLE PERSONAL INCOME	687.7	743.3	802.9	878.9	956.6	1027.0	1112.3	1195.9	1284.0	1373.4	1465.9	8.44	7.14	7.83
CORP PROFITS WITHOUT IVA ADJ.	75.3	81.7	95.6	109.5	123.0	133.3	147.0	159.4	171.3	185.3	200.7	13.03	7.95	10.49
UNEMPLOYMENT RATE	5.0	5.9	5.4	4.9	4.7	4.7	4.4	4.4	4.4	4.4	4.5	-5.51	.51	-3.11
PERSONAL SAVINGS RATE	7.0	8.0	7.9	8.0	7.6	7.1	6.9	6.5	6.3	6.3	6.3	-2.09	-2.36	-2.61
FEDERAL GOVT SURPLUS OR DEF	-13.7	-21.4	-19.5	-21.4	-17.1	-7.1	-3.9	8.4	7.1	8.0	7.7	******	******	******

THIS FORECAST WAS PREPARED BY CHASE ECONOMETRICS, INC. ON NOV 1971 AND IS THE 1ST FORECAST IN A SET OF 1 FORECASTS
THE PRINCIPLE ASSUMPTIONS FOR THIS RUN ARE FULL EMPLOYMENT BASELINE FOR CEQ MACRO

VARIABLE NAME	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	ANNUALIZED COMPOUND GROWTH RATES,YEARS- 1-5	6-10	1-10
TABLE 2.1 -- GROSS NATIONAL PRODUCT IN CONSTANT DOLLARS														
GROSS NATIONAL PRODUCT	720.0	742.0	786.4	836.6	875.7	907.0	954.3	997.3	1038.0	1083.6	1131.5	5.17	4.35	4.79
CONSUMPTION EXPENDITURES	496.5	493.9	521.1	552.7	583.7	608.6	639.2	667.2	694.5	721.0	748.4	5.36	4.02	4.72
DURABLE GOODS	92.0	89.5	94.0	101.4	107.9	112.9	121.2	127.0	132.7	138.7	144.4	5.97	4.48	5.45
NONDURABLE GOODS	207.3	213.5	226.4	239.6	252.0	261.1	273.0	283.9	294.0	305.7	317.2	5.16	3.82	4.49
SERVICES	191.3	190.9	199.9	211.7	223.7	234.6	245.0	256.2	267.0	276.7	286.0	5.29	4.02	4.62
GROSS PRIVATE INVESTMENT	109.0	109.0	119.9	132.3	135.0	136.0	145.7	154.0	159.5	166.4	174.6	5.84	4.62	5.37
FIXED INVESTMENT	108.0	106.1	112.6	120.5	125.3	128.9	136.5	143.5	149.7	156.7	164.4	4.99	4.75	4.98
NONRESIDENTIAL	79.2	78.6	83.6	93.0	101.4	105.7	112.4	118.3	123.3	129.2	135.1	7.68	4.69	6.19
STRUCTURES	24.2	23.0	23.6	26.0	28.9	30.4	32.6	34.5	36.4	38.6	40.6	7.24	5.68	6.52
EQUIPMENT	54.4	55.6	59.9	66.3	72.4	75.3	79.9	83.8	86.9	90.6	94.4	7.86	4.28	6.05
RESIDENTIAL STRUCTURES	22.2	27.4	29.0	27.4	23.9	23.2	24.1	25.2	26.4	27.5	29.3	-4.14	5.06	.73
NONFARM	20.0	27.0	28.6	27.0	23.5	22.0	23.7	24.0	26.0	27.1	28.9	-4.20	5.14	.74
FARM	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.00	.00	.00
CHANGE IN INVENTORIES	1.3	2.9	7.3	11.9	10.5	7.9	9.2	10.5	9.0	9.7	10.2	20.31	2.57	14.90
NONFARM	2.0	2.2	7.2	11.9	10.5	7.9	9.2	10.5	9.0	9.7	10.2	36.89	2.57	18.33
FARM	.7	.7	.1	.0	.0	.0	.0	.0	.0	.0	.0	******	******	******
NET EXPORTS OF GOODS AND SERV	2.4	1.4	5.2	4.9	3.3	2.4	1.5	.2	-.4	-.2	.4	13.00	-26.31	-12.26
EXPORTS	52.2	54.0	55.3	58.2	60.7	63.4	66.3	69.4	72.0	76.0	81.1	4.09	5.17	4.61
IMPORTS	49.0	52.6	50.1	53.3	57.4	61.0	64.0	69.1	73.1	76.9	80.7	3.70	5.64	4.06
GOVERNMENT PURCHASES	139.5	138.2	140.2	146.0	153.1	160.0	168.0	176.0	185.2	196.4	208.0	3.73	5.49	4.65
FEDERAL	65.4	61.2	58.9	60.2	61.0	62.1	64.2	65.7	68.1	71.2	74.7	.36	3.06	2.23
NATIONAL DEFENSE	50.7	45.5	43.6	43.0	43.4	43.5	44.4	45.1	46.0	47.2	48.5	-1.13	2.22	.71
OTHER	14.7	15.7	15.3	16.5	17.6	18.6	19.7	20.6	22.0	24.0	26.1	4.36	7.30	5.82
STATE AND LOCAL	77.0	77.0	81.3	86.5	92.0	97.9	103.0	110.3	117.1	125.2	133.4	6.19	6.47	6.29
TABLE 2.2 -- IMPLICIT PRICE DEFLATORS FOR GNP														
GROSS NATIONAL PRODUCT	135.3	141.6	145.9	151.5	157.0	163.0	168.9	175.2	181.5	187.6	193.3	3.68	3.43	3.52
CONSUMPTION EXPENDITURES	129.4	134.6	137.9	142.4	147.3	152.6	157.5	162.9	168.3	173.4	178.3	3.10	3.14	3.17
DURABLE GOODS	108.9	113.1	114.0	116.0	118.4	121.0	123.4	125.9	128.4	130.5	132.4	1.71	1.77	1.77
NONDURABLE GOODS	127.7	131.5	134.0	137.2	140.3	143.3	145.0	148.6	151.2	153.4	155.4	2.17	1.60	1.87
SERVICES	140.2	140.2	153.7	160.0	169.1	178.1	187.5	197.1	207.1	217.1	226.7	4.71	4.06	4.03
FIXED INVESTMENT	132.7	140.5	147.1	154.3	160.7	168.0	177.5	186.2	195.2	203.3	210.0	4.60	4.39	4.60
NONRESIDENTIAL	130.0	136.0	142.4	149.0	155.6	163.5	172.0	180.1	188.5	196.0	202.7	4.56	4.19	4.46
STRUCTURES	152.1	167.5	180.7	192.3	204.7	218.7	234.0	249.6	265.7	281.3	296.2	6.90	6.00	6.53
EQUIPMENT	120.1	124.1	127.3	131.5	135.9	141.2	146.7	151.5	156.1	159.7	162.4	3.20	2.57	3.02
RESIDENTIAL	142.4	151.2	160.5	172.3	182.6	192.6	203.4	214.9	226.4	237.6	248.3	6.23	5.11	5.66
NONFARM	142.4	151.3	160.6	172.4	182.8	192.0	203.0	215.2	226.0	238.0	248.7	6.24	5.11	5.67
FARM	138.6	145.2	155.0	163.0	171.0	179.0	185.5	195.0	203.0	211.0	219.0	5.36	4.24	4.66
CHANGE IN INVENTORIES	120.0	105.4	129.9	132.4	135.0	138.4	141.4	144.2	146.6	148.4	149.6	7.06	1.43	3.97
EXPORTS	125.2	125.6	130.3	134.0	137.7	141.9	146.1	150.6	155.3	160.9	166.5	3.10	3.32	3.10
IMPORTS	110.6	127.1	136.9	139.7	142.7	146.0	149.2	152.7	156.1	159.7	163.3	3.53	2.29	2.02
GOVERNMENT PURCHASES	157.4	160.3	170.5	180.7	194.6	201.3	200.0	215.3	222.2	228.6	234.5	4.57	3.04	3.75
FEDERAL	148.7	150.2	160.9	181.3	187.7	192.4	196.0	200.9	204.0	207.0	210.4	5.01	1.00	3.21
STATE AND LOCAL	165.0	176.3	184.7	192.1	199.2	206.9	215.4	223.0	232.3	240.4	247.9	4.00	3.57	3.05

A2

THIS FORECAST WAS PREPARED BY CHASE ECONOMETRICS, INC. ON NOV 1971 AND IS THE 1ST FORECAST IN A SET OF 1 FORECASTS
THE PRINCIPLE ASSUMPTIONS FOR THIS RUN ARE FULL EMPLOYMENT AND 1.0% PRICES

VARIABLE NAME	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	ANNUALIZED COMPOUND GROWTH RATES, YEARS- 1-5	6-10	1-10
TABLE 1.1 -- GROSS NATIONAL PRODUCT IN CURRENT DOLLARS														
GROSS NATIONAL PRODUCT	974.1	1050.4	1151.8	1271.5	1381.6	1487.4	1616.0	1751.1	1891.6	2038.2	2198.4	9.09	7.90	8.50
CONSUMPTION EXPENDITURES	615.9	664.9	720.4	789.3	863.2	931.6	1007.3	1084.8	1165.3	1245.4	1327.5	8.00	7.14	7.90
DURABLE GOODS	104.7	101.3	108.3	117.4	127.8	137.0	150.6	161.4	172.3	182.9	193.1	7.86	6.42	7.43
NONDURABLE GOODS	264.7	280.6	304.0	329.8	354.9	375.2	398.5	422.2	445.6	468.7	492.5	7.53	5.43	6.66
SERVICES	262.5	283.0	308.1	342.0	380.5	419.4	458.2	501.2	547.5	593.8	641.9	10.34	8.79	9.57
GROSS PRIVATE INVESTMENT	136.6	152.3	178.1	204.3	220.3	234.7	260.2	288.7	315.9	343.4	371.9	11.42	9.34	10.42
FIXED INVESTMENT	133.0	149.1	168.1	188.7	206.5	225.0	248.6	273.6	300.6	328.2	355.9	10.83	9.39	10.14
NONRESIDENTIAL	109.3	107.6	121.7	142.4	165.1	183.0	201.6	219.2	238.7	260.5	282.1	14.21	8.76	11.29
STRUCTURES	36.0	38.5	42.9	51.9	60.2	68.2	78.1	87.6	98.0	110.1	122.2	15.35	11.85	13.49
EQUIPMENT	65.3	69.1	78.0	90.5	104.9	114.9	123.5	131.6	140.6	150.4	159.9	13.56	6.66	9.76
RESIDENTIAL STRUCTURES	31.7	41.5	46.4	46.2	41.4	42.0	47.0	54.4	61.9	67.6	73.0	.25	11.96	6.50
NONFARM	31.1	41.0	45.0	45.6	40.7	41.2	46.2	53.6	61.1	66.8	72.9	.17	12.00	6.41
CHANGE IN INVENTORIES	2.0	3.2	10.0	15.6	13.8	9.7	11.6	15.0	15.3	15.3	16.0	32.44	0.33	19.77
NET EXPORTS OF GOODS AND SERV	3.9	1.0	2.9	2.7	.1	-.9	-.0	-1.3	-1.2	.6	3.1	******	******	13.14
EXPORTS	62.9	67.9	72.1	78.0	83.6	89.9	96.7	104.3	113.0	123.6	135.2	7.29	8.75	7.95
IMPORTS	59.0	66.0	69.2	75.3	83.5	90.8	97.5	105.7	114.2	123.1	132.1	7.97	7.89	7.85
GOVERNMENT PURCHASES	219.4	232.6	258.3	275.4	298.0	322.1	349.4	378.9	411.5	448.9	487.0	8.48	8.70	8.57
FEDERAL	97.2	96.0	108.1	109.2	114.6	119.5	125.7	132.0	139.4	148.0	157.1	5.39	5.73	5.52
NATIONAL DEFENSE	75.3	72.0	74.0	79.4	81.5	83.6	87.1	90.5	94.3	98.1	102.1	3.82	4.85	3.95
OTHER	21.9	24.0	26.0	29.0	33.0	35.0	38.6	41.4	45.1	49.9	55.0	9.59	9.23	9.22
STATE AND LOCAL	122.2	135.7	150.2	166.2	183.4	202.6	223.6	246.9	272.1	300.9	330.7	10.53	10.27	10.39
TABLE 1.2 -- OTHER MAJOR ECONOMIC INDICATORS														
MONEY SUPPLY WITHOUT TIME DEP	212.5	224.4	239.5	257.4	279.3	307.1	337.2	367.5	397.9	426.9	454.7	8.16	7.76	8.16
MONEY SUPPLY WITH TIME DEPOSIT	428.6	478.1	526.6	574.7	637.2	705.9	774.1	847.5	923.5	1000.7	1079.0	10.23	8.66	9.46
TREASURY BILL RATE, 91-DAY	6.44	4.34	4.66	5.11	4.58	4.54	4.80	4.86	4.86	4.90	5.15	1.13	1.00	1.93
CORPORATE BOND RATE, NEW ISSUE	9.05	7.90	7.95	7.68	7.19	6.99	7.09	7.06	7.05	7.12	7.23	-3.01	.47	-.90
INDEX OF INDUS PROD, TOTAL	106.5	106.7	114.5	122.3	120.3	131.5	139.4	146.5	153.4	160.6	168.1	5.36	4.79	5.10
INDEX OF INDUS PROD, MFG.	105.1	104.9	113.1	121.3	127.4	130.5	138.3	145.3	152.1	159.3	166.2	5.59	4.80	5.20
INDEX OF INDUS PROD, STEEL	106.0	96.2	101.6	115.2	117.1	115.5	120.1	120.6	142.0	149.6	158.6	4.66	7.19	5.70
INDEX OF CAPACITY UTILIZATION	82.7	81.0	86.0	89.3	90.9	89.9	90.0	91.5	91.9	92.3	92.7	2.41	.53	1.41
NEW PASSENGER CAR SALES, SAAR	8.46	10.33	11.22	11.71	11.92	12.03	12.73	13.13	13.51	13.80	14.19	5.89	2.74	3.59
TOTAL PRIVATE HOUSING STARTS	1.46	2.00	2.07	1.80	1.59	1.63	1.70	1.99	2.10	2.20	2.30	-4.03	7.42	1.93
GNP IN 1958 DOLLARS	720.0	742.0	780.4	835.7	872.4	899.4	941.2	984.8	1029.0	1075.0	1123.2	4.93	4.52	4.71
IMPLICIT GNP DEFLATOR	135.3	141.6	146.1	152.1	158.4	165.4	171.7	177.8	183.8	189.6	195.0	3.96	3.24	3.62
CONSUMER PRICE INDEX	116.3	121.2	125.0	130.6	137.0	143.6	149.2	154.0	160.4	165.7	170.6	4.34	3.42	3.87
WHSL PRICE INDEX (INDUS COMM)	110.0	114.0	116.3	118.7	121.5	125.3	128.1	130.1	131.0	133.1	134.0	2.38	1.15	1.81
PCT CHANGE IN GNP$ (ANN RATE)	6.70	7.83	9.66	10.39	8.66	7.66	8.64	8.36	8.02	7.75	7.47	-.55	-3.59	-.52
PCT CHANGE IN GNP58 (ANN RATE)	3.84	3.05	6.25	6.00	4.38	3.10	4.64	4.63	4.49	4.46	4.40	.37	-.87	4.75
PCT CHANGE IN GNP DEFLATOR	2.94	4.62	3.19	4.14	4.11	4.41	3.82	3.57	3.30	3.15	2.86	-1.15	-7.00	-5.19
PCT CHANGE IN CONS PRICE INDEX	4.30	4.19	3.17	4.47	4.80	4.83	3.87	3.80	3.61	3.29	2.99	3.65	-6.27	-3.68
DISPOSABLE PERSONAL INCOME	687.7	743.3	804.7	888.5	958.8	1029.1	1112.1	1193.8	1288.4	1367.8	1458.4	8.47	7.81	7.77
CORP PROFITS WITHOUT IVA ADJ.	75.3	81.7	96.9	111.0	126.6	137.5	150.5	161.4	174.4	188.9	204.6	13.91	7.97	10.73
UNEMPLOYMENT RATE	5.0	5.9	5.4	5.0	4.8	4.9	4.5	4.5	4.6	4.6	4.6	-4.70	.54	-2.75
PERSONAL SAVINGS RATE	7.0	8.0	7.9	7.9	7.5	6.9	6.9	6.5	6.4	6.3	6.3	-3.45	-2.30	-2.66
FEDERAL GOVT SURPLUS OR DEF	-13.7	-21.4	-18.6	-20.4	-15.5	-5.0	-2.6	9.1	9.1	9.1	8.0	******	******	******

A3

THIS FORECAST WAS PREPARED BY CHASE ECONOMETRICS, INC. ON NOV 1971 AND IS THE 1ST FORECAST IN A SET OF 1 FORECASTS
THE PRINCIPLE ASSUMPTIONS FOR THIS RUN ARE FULL EMPLOYMENT AND 1.00 PRICES

VARIABLE NAME	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	ANNUALIZED COMPOUND GROWTH RATES,YEARS- 1-5	6-10	1-10
TABLE 2.1 -- GROSS NATIONAL PRODUCT IN CONSTANT DOLLARS														
GROSS NATIONAL PRODUCT	720.0	742.0	788.4	835.7	872.4	899.4	941.2	984.8	1029.0	1075.0	1123.2	4.93	4.52	4.71
CONSUMPTION EXPENDITURES	496.5	493.9	521.5	552.1	581.7	604.7	633.8	661.8	690.1	717.4	745.4	5.19	4.14	4.67
DURABLE GOODS	92.0	89.5	94.9	100.8	106.9	111.4	120.0	126.3	132.4	138.3	144.1	5.63	4.60	5.62
NONDURABLE GOODS	287.3	283.5	296.5	309.3	321.1	329.4	339.0	351.0	362.7	373.7	385.2	4.99	3.87	4.42
SERVICES	191.3	198.9	208.2	212.0	223.7	233.9	243.1	253.8	265.0	275.4	286.1	5.20	4.16	4.69
GROSS PRIVATE INVESTMENT	109.0	109.0	121.9	133.4	137.0	136.0	143.1	151.7	159.0	166.2	174.1	5.85	5.04	5.34
FIXED INVESTMENT	108.0	106.1	114.3	121.7	127.0	130.0	135.1	141.6	148.7	156.2	163.8	5.21	4.93	4.94
NONRESIDENTIAL	79.2	78.6	85.4	95.0	104.5	108.5	112.3	116.5	121.5	127.7	133.9	8.37	4.58	6.89
STRUCTURES	24.2	23.0	23.7	26.7	28.8	30.0	31.9	33.6	35.4	37.6	39.7	6.91	5.62	6.25
EQUIPMENT	54.4	55.6	61.7	68.2	75.7	78.4	80.4	82.8	86.1	90.1	94.2	8.96	4.85	6.82
RESIDENTIAL STRUCTURES	22.2	27.4	28.0	26.7	22.5	21.5	22.0	25.1	27.2	28.5	29.0	-5.90	6.95	.93
NONFARM	28.0	27.0	28.4	26.3	22.1	21.1	22.4	24.7	26.0	28.1	29.4	-5.99	7.06	.95
FARM	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.00	.00	.00
CHANGE IN INVENTORIES	1.0	2.9	7.7	11.7	10.1	6.0	8.0	10.1	10.1	10.0	10.4	23.75	6.00	15.17
NONFARM	2.0	2.2	7.6	11.7	10.1	6.0	8.0	10.1	10.1	10.0	10.4	32.02	6.00	18.52
FARM	.7	.7	.1	.0	.0	.0	.0	.0	.0	.0	.0	******	******	******
NET EXPORTS OF GOODS AND SERV	2.4	1.4	4.0	4.1	1.9	.6	.2	-.4	-.7	-.4	.3	-19.00	9.05	-15.35
EXPORTS	52.2	54.0	55.3	58.0	60.3	62.0	65.6	68.8	72.4	76.7	81.2	3.03	5.49	4.63
IMPORTS	49.0	52.6	50.5	53.9	58.5	62.2	65.3	69.2	73.2	77.1	80.9	4.28	5.40	4.89
GOVERNMENT PURCHASES	139.5	138.2	140.1	146.2	151.0	157.4	164.2	171.7	180.0	191.0	203.3	3.31	5.49	4.38
FEDERAL	65.4	61.2	58.9	60.1	60.7	61.4	63.1	64.5	66.9	70.0	73.4	.87	3.83	2.83
NATIONAL DEFENSE	50.7	45.5	43.6	43.7	43.2	43.0	43.7	44.3	45.2	46.4	47.7	-1.42	2.10	.51
OTHER	14.7	15.7	15.3	16.4	17.5	18.4	19.4	20.3	21.7	23.6	25.7	4.05	7.27	5.61
STATE AND LOCAL	77.0	77.0	81.2	86.1	91.1	96.0	101.1	107.1	113.9	121.0	129.9	5.69	6.40	5.98
TABLE 2.2 -- IMPLICIT PRICE DEFLATORS FOR GNP														
GROSS NATIONAL PRODUCT	135.3	141.6	146.1	152.1	158.4	165.4	171.7	177.8	183.0	189.6	195.0	3.96	3.24	3.62
CONSUMPTION EXPENDITURES	129.4	134.6	138.1	142.9	148.4	154.1	158.9	163.9	168.0	173.6	178.1	3.43	2.89	3.16
DURABLE GOODS	108.9	113.1	114.2	116.5	119.6	122.9	125.5	127.8	130.1	132.2	134.1	2.11	1.67	1.91
NONDURABLE GOODS	127.7	131.5	134.2	137.8	141.3	144.6	147.2	149.8	152.2	154.3	156.2	2.42	1.50	1.93
SERVICES	148.2	148.2	153.9	161.3	170.0	179.3	188.5	197.5	206.5	215.6	224.3	4.88	4.45	4.71
FIXED INVESTMENT	132.7	140.5	147.1	155.0	162.6	173.1	183.9	193.3	202.1	210.0	217.3	5.34	4.25	4.96
NONRESIDENTIAL	130.0	136.0	142.4	149.9	158.0	168.7	179.5	188.2	196.4	203.9	210.6	5.39	4.88	4.91
STRUCTURES	152.1	167.5	181.3	194.2	209.1	226.0	244.6	260.7	276.7	292.4	307.6	7.87	5.90	6.90
EQUIPMENT	120.1	124.1	127.5	132.6	138.6	146.5	153.6	159.8	163.4	166.9	169.7	4.22	2.51	3.53
RESIDENTIAL	142.4	151.2	160.0	173.1	184.2	194.9	205.7	216.5	227.2	237.4	247.2	6.55	4.70	5.61
NONFARM	142.4	151.3	160.9	173.3	184.4	195.2	206.1	216.9	227.5	237.0	247.0	6.58	4.69	5.62
FARM	138.6	145.2	155.0	163.0	171.0	179.0	185.5	195.0	203.0	211.0	219.0	5.36	4.24	4.66
CHANGE IN INVENTORIES	120.0	105.4	130.2	133.5	137.3	142.5	146.3	149.1	151.5	153.3	154.6	7.84	1.38	4.35
EXPORTS	125.2	125.6	130.4	134.4	138.5	143.2	147.4	151.6	155.9	161.2	166.5	3.34	3.09	3.18
IMPORTS	118.6	127.1	136.9	139.7	142.7	146.0	149.2	152.6	156.1	159.6	163.3	3.53	2.29	2.82
GOVERNMENT PURCHASES	157.4	168.3	178.6	188.3	196.3	204.6	212.0	220.7	227.6	234.0	239.9	5.00	3.05	4.01
FEDERAL	148.7	158.2	170.0	181.0	188.9	194.6	199.2	204.5	208.4	211.4	214.2	5.31	1.83	3.62
STATE AND LOCAL	165.0	176.3	184.0	192.9	201.3	210.9	221.3	230.4	238.9	246.9	254.5	4.57	3.56	4.16

THIS FORECAST WAS PREPARED BY CHASE ECONOMETRICS, INC. ON DEC 1971 AND IS THE FORECAST IN A SET OF FORECASTS
THE PRINCIPLE ASSUMPTIONS FOR THIS RUN ARE FULL EMPLOYMENT AND PRICES AND GOVERNMENT OFFSET

VARIABLE NAME	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	ANNUALIZED COMPOUND GROWTH RATES,YEARS- 1-5	6-10	1-10
TABLE 1.1 -- GROSS NATIONAL PRODUCT IN CURRENT DOLLARS														
GROSS NATIONAL PRODUCT	974.1	1050.4	1151.8	1271.5	1385.7	1502.8	1641.5	1782.7	1926.2	2080.0	2245.4	9.37	8.15	8.80
CONSUMPTION EXPENDITURES	615.9	664.9	720.4	789.3	864.1	937.3	1021.9	1106.0	1191.4	1277.8	1367.8	8.96	7.56	8.34
DURABLE GOODS	104.7	101.3	108.3	117.4	120.0	137.9	152.3	163.7	175.0	186.7	197.9	8.03	6.77	7.72
NONDURABLE GOODS	264.7	280.6	304.0	329.8	355.3	377.3	404.4	429.2	453.4	478.1	503.8	7.71	5.65	6.71
SERVICES	262.5	283.0	308.1	342.0	388.8	421.7	465.3	513.1	562.9	613.0	666.1	10.49	9.38	9.97
GROSS PRIVATE INVESTMENT	136.6	152.3	178.1	204.3	220.6	237.3	264.3	292.3	317.2	345.0	375.1	11.73	9.14	10.52
FIXED INVESTMENT	133.0	149.1	168.1	188.7	206.7	226.6	250.9	276.1	302.3	330.0	358.9	11.03	9.36	10.24
NONRESIDENTIAL	109.3	107.6	121.7	142.4	165.3	184.0	204.5	223.0	242.6	265.7	288.7	14.40	9.00	11.58
STRUCTURES	36.0	38.5	42.9	51.9	60.2	68.3	78.4	88.2	99.0	111.0	124.5	15.41	12.20	13.91
EQUIPMENT	65.3	69.1	78.0	90.5	105.1	116.5	126.2	134.8	143.6	153.9	164.2	13.96	6.01	10.09
RESIDENTIAL STRUCTURES	31.7	41.5	46.4	46.2	41.4	41.0	46.3	53.1	59.7	64.3	70.1	.15	10.93	5.99
NONFARM	31.1	41.0	45.0	45.6	40.7	41.1	45.6	52.3	58.9	63.4	69.3	.07	11.03	6.01
CHANGE IN INVENTORIES	2.0	3.2	10.0	15.6	13.9	10.7	13.5	16.2	14.9	15.0	16.2	35.66	4.74	19.93
NET EXPORTS OF GOODS AND SERV	3.9	1.0	2.9	2.7	.1	-1.3	-2.0	-3.4	-3.4	-1.0	.5	******	******	-7.91
EXPORTS	62.9	67.9	72.1	78.0	83.6	89.9	96.7	104.3	112.0	123.4	134.9	7.30	8.69	7.93
IMPORTS	59.0	66.0	69.2	75.3	83.5	91.3	98.7	107.6	116.2	125.2	134.4	8.11	8.04	8.07
GOVERNMENT PURCHASES	219.4	232.6	250.3	275.4	301.0	329.6	357.4	387.7	421.1	459.2	502.0	9.10	8.87	8.91
FEDERAL	97.2	96.8	100.1	109.2	114.6	119.5	125.7	132.7	141.2	150.2	159.0	5.39	6.10	5.72
NATIONAL DEFENSE	75.3	72.0	74.0	79.4	81.5	83.6	87.1	90.5	94.3	98.1	102.1	3.02	4.05	3.95
OTHER	21.9	24.0	26.0	29.0	33.0	35.0	38.6	42.2	46.9	52.1	57.7	9.59	10.56	9.81
STATE AND LOCAL	122.2	135.7	150.2	166.2	186.4	210.1	231.6	254.9	279.9	308.9	342.2	11.53	10.25	10.81
TABLE 1.2 -- OTHER MAJOR ECONOMIC INDICATORS														
MONEY SUPPLY WITHOUT TIME DEP	212.5	224.4	239.5	257.4	279.4	307.0	338.5	370.3	403.3	435.4	466.7	8.23	8.35	8.47
MONEY SUPPLY WITH TIME DEPOSIT	420.6	470.1	526.6	574.7	637.3	706.9	775.9	852.7	934.0	1016.7	1100.0	10.27	9.14	9.70
TREASURY BILL RATE, 91-DAY	6.44	4.34	4.66	5.11	4.50	4.61	4.90	5.01	4.99	5.12	5.31	1.52	1.62	2.27
CORPORATE BOND RATE, NEW ISSUE	9.05	7.90	7.95	7.68	7.19	7.02	7.10	7.16	7.19	7.30	7.42	-2.92	.01	-.70
INDEX OF INDUS PROD, TOTAL	106.5	106.7	114.5	122.3	120.5	132.5	141.2	140.1	154.1	161.3	168.0	5.57	4.56	5.22
INDEX OF INDUS PROD, MFG.	105.1	104.9	113.1	121.3	127.6	131.5	140.1	146.9	152.9	160.0	167.5	5.01	4.56	5.33
INDEX OF INDUS PROD, STEEL	106.0	96.2	101.6	115.2	117.2	117.0	122.5	129.4	130.9	144.0	152.7	5.01	5.66	5.26
INDEX OF CAPACITY UTILIZATION	82.7	81.0	86.0	89.3	90.9	90.5	91.6	92.1	92.1	92.6	93.1	2.57	.41	1.45
NEW PASSENGER CAR SALES,SAAR	9.44	10.33	11.22	11.71	11.93	12.09	12.70	13.17	13.56	13.90	14.30	4.02	2.85	3.68
TOTAL PRIVATE HOUSING STARTS	1.46	2.00	2.07	1.00	1.59	1.61	1.73	1.91	2.06	2.12	2.21	-5.23	6.29	1.09
GNP IN 1958 DOLLARS	720.0	742.0	780.4	835.7	874.6	907.0	954.1	997.6	1030.6	1080.2	1131.7	5.17	4.36	4.80
IMPLICIT GNP DEFLATOR	135.3	141.6	146.1	152.1	158.4	165.5	172.0	178.7	185.4	192.0	198.4	3.99	3.63	3.82
CONSUMER PRICE INDEX	116.3	121.2	125.0	130.6	137.0	143.7	149.6	155.9	162.4	169.6	174.7	4.35	3.96	4.14
WHSL PRICE INDEX (INDUS COMM)	110.0	114.0	116.3	118.7	121.5	125.3	128.2	130.4	132.4	134.0	135.3	2.39	1.37	1.92
PCT CHANGE IN GNP$ (ANN RATE)	6.70	7.83	9.66	10.39	8.98	8.45	9.23	8.60	8.05	7.90	7.95	1.93	-3.66	.17
PCT CHANGE IN GNP58 (ANN RATE)	3.84	3.05	6.25	6.00	4.65	3.80	5.10	4.56	4.11	4.29	4.40	5.63	-3.17	4.35
PCT CHANGE IN GNP DEFLATOR	2.94	4.62	3.19	4.14	4.15	4.47	3.93	3.87	3.79	3.54	3.32	-.82	-4.10	-3.68
PCT CHANGE IN CONS PRICE INDEX	4.30	4.19	3.17	4.47	4.87	4.80	4.10	4.27	4.16	3.83	3.57	3.91	-3.39	-1.74
DISPOSABLE PERSONAL INCOME	687.7	743.3	804.7	880.5	960.0	1030.5	1131.8	1217.3	1300.4	1402.3	1500.5	8.72	7.30	8.11
CORP PROFITS WITHOUT IVA ADJ.	75.3	81.7	96.9	111.0	127.0	139.6	154.2	165.5	178.7	194.5	211.5	14.33	8.21	11.14
UNEMPLOYMENT RATE	5.0	5.9	5.4	5.0	4.0	4.0	4.4	4.4	4.5	4.4	4.4	-5.13	.40	-3.16
PERSONAL SAVINGS RATE	7.0	8.0	7.9	7.9	7.6	7.2	7.2	6.6	6.4	6.3	6.2	-2.45	-3.76	-2.81
FEDERAL GOVT SURPLUS OR DEF	-13.7	-21.4	-18.6	-20.4	-16.7	-9.0	-12.3	.7	-.5	1.4	2.2	******	******	******

THIS FORECAST WAS PREPARED BY CHASE ECONOMETRICS, INC. ON DEC 1971 AND IS THE FORECAST IN A SET OF FORECASTS
THE PRINCIPLE ASSUMPTIONS FOR THIS RUN ARE FULL EMPLOYMENT AND PRICES AND GOVERNMENT OFFSET

TABLE 2.1 -- GROSS NATIONAL PRODUCT IN CONSTANT DOLLARS

VARIABLE NAME	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	ANNUALIZED COMPOUND GROWTH RATES,YEARS- 1-5	6-10	1-10
GROSS NATIONAL PRODUCT	720.0	742.0	788.4	835.7	874.6	907.0	954.1	997.6	1038.6	1083.2	1131.7	5.17	4.36	4.80
CONSUMPTION EXPENDITURES	496.5	493.9	521.5	552.1	582.3	608.2	641.6	670.9	698.6	725.7	753.6	5.34	4.10	4.80
DURABLE GOODS	92.0	89.5	94.9	100.8	107.0	112.1	121.1	127.5	133.5	139.0	145.7	5.79	4.72	5.55
NONDURABLE GOODS	207.3	213.5	226.5	239.3	251.4	261.0	274.3	285.4	295.9	306.9	318.6	5.16	3.82	4.55
SERVICES	191.3	190.9	200.2	212.0	223.9	235.0	246.2	258.1	269.1	278.9	289.3	5.33	4.11	4.72
GROSS PRIVATE INVESTMENT	109.0	109.0	121.9	133.4	137.2	138.5	145.5	153.3	158.3	165.0	172.9	6.17	4.41	5.26
FIXED INVESTMENT	100.0	106.1	114.3	121.7	127.1	131.0	136.3	142.5	148.5	155.3	162.5	5.41	4.49	4.85
NONRESIDENTIAL	79.2	78.6	85.4	95.0	104.6	109.6	113.9	118.2	122.6	128.0	134.9	8.65	4.31	6.17
STRUCTURES	24.2	23.0	23.7	26.7	28.8	30.1	32.0	33.7	35.5	37.7	39.0	6.94	5.64	6.27
EQUIPMENT	54.4	55.6	61.7	68.2	75.8	79.5	82.0	84.5	87.2	91.0	95.1	9.33	3.78	6.13
RESIDENTIAL STRUCTURES	22.2	27.4	28.0	26.7	22.5	21.4	22.4	24.3	25.9	26.5	27.6	-6.82	5.40	.88
NONFARM	20.0	27.0	20.4	26.3	22.1	21.0	22.0	23.9	25.5	26.1	27.2	-6.12	5.49	.89
FARM	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.00	.00	.00
CHANGE IN INVENTORIES	1.3	2.9	7.7	11.7	10.1	7.5	9.2	10.9	9.8	9.7	10.4	26.75	3.07	15.17
NONFARM	2.0	2.2	7.6	11.7	10.1	7.5	9.2	10.9	9.8	9.7	10.4	35.22	3.07	17.53
FARM	.7	.7	.1	.0	.0	.0	.0	.0	.0	.0	.0	******	******	******
NET EXPORTS OF GOODS AND SERV	2.4	1.4	4.0	4.1	1.9	.3	-.6	-1.9	-2.5	-2.5	-2.2	-33.98	******	******
EXPORTS	52.2	54.0	55.3	58.0	60.4	62.0	65.5	68.6	71.9	75.9	80.1	3.83	5.15	4.46
IMPORTS	49.0	52.6	50.5	53.9	58.5	62.5	66.1	70.5	74.4	78.4	82.3	1.42	5.62	5.10
GOVERNMENT PURCHASES	139.5	138.2	140.1	146.2	153.2	161.0	167.7	175.2	184.3	195.1	207.4	3.89	5.46	4.61
FEDERAL	65.4	61.2	58.9	60.1	60.7	61.4	63.1	64.8	67.6	70.0	74.2	.47	4.15	2.14
NATIONAL DEFENSE	50.7	45.5	43.6	43.7	43.2	43.0	43.7	44.2	45.1	46.2	47.4	-1.42	2.06	.44
OTHER	14.7	15.7	15.3	16.4	17.5	18.4	19.4	20.6	22.5	24.6	26.0	4.05	8.44	6.12
STATE AND LOCAL	77.0	77.0	81.2	86.1	92.6	99.6	104.6	110.4	116.7	124.3	133.2	6.45	6.23	4.20

TABLE 2.2 -- IMPLICIT PRICE DEFLATORS FOR GNP

GROSS NATIONAL PRODUCT	135.3	141.6	146.1	152.1	158.4	165.5	172.0	178.7	185.4	192.0	198.4	3.99	3.63	3.82
CONSUMPTION EXPENDITURES	129.4	134.6	138.1	142.9	148.4	154.1	159.3	164.8	170.5	176.1	181.5	3.44	3.32	3.37
DURABLE GOODS	108.9	113.1	114.2	116.5	119.6	123.0	125.7	128.4	131.1	133.0	135.0	2.13	1.96	2.04
NONDURABLE GOODS	127.7	131.5	134.2	137.8	141.3	144.7	147.4	150.4	153.2	155.9	158.1	2.42	1.77	2.07
SERVICES	140.2	148.2	153.9	161.3	170.0	179.4	188.9	198.8	209.1	219.7	230.2	4.98	5.06	5.01
FIXED INVESTMENT	132.7	140.5	147.1	155.0	162.6	173.0	183.9	193.7	203.5	213.0	220.7	5.33	4.07	5.14
NONRESIDENTIAL	130.0	136.0	142.4	149.9	158.0	168.6	179.5	188.6	197.0	206.3	214.0	5.37	4.50	5.00
STRUCTURES	152.1	167.5	181.3	194.2	209.1	226.9	245.1	261.0	279.0	296.1	312.0	7.00	5.30	7.10
EQUIPMENT	120.1	124.1	127.5	132.6	138.6	146.5	153.9	159.5	164.7	169.0	172.4	4.33	.82	3.33
RESIDENTIAL	142.4	151.2	160.0	173.1	184.2	195.2	206.7	218.5	230.4	242.1	253.7	6.58	4.26	5.91
NONFARM	142.4	151.3	160.9	173.3	184.4	195.5	207.1	218.9	230.0	242.6	254.2	6.62	4.26	5.93
FARM	138.6	145.2	155.0	163.0	171.0	179.0	185.5	195.0	203.0	211.0	219.0	5.36	4.76	4.64
CHANGE IN INVENTORIES	120.0	105.4	130.2	133.5	137.4	142.6	146.5	149.6	152.4	154.4	156.4	7.05	1.65	4.68
EXPORTS	125.2	125.6	130.4	134.4	138.5	143.2	147.6	152.1	156.0	162.4	168.5	3.36	3.36	3.31
IMPORTS	110.6	127.1	136.9	139.7	142.7	146.0	149.2	152.7	156.1	159.7	163.4	3.52	2.30	2.92
GOVERNMENT PURCHASES	157.4	160.3	170.6	180.3	196.4	204.7	213.1	221.2	229.5	235.4	242.0	5.02	3.23	4.11
FEDERAL	140.7	150.2	170.0	181.0	188.9	194.7	199.2	204.7	208.9	212.2	215.3	5.12	1.94	3.48
STATE AND LOCAL	165.0	176.3	184.0	192.9	201.3	210.9	221.4	230.9	239.9	248.4	256.9	4.58	3.70	4.24

THIS FORECAST WAS PREPARED BY CHASE ECONOMETRICS, INC. ON DEC 1971 AND IS THE FORECAST IN A SET OF FORECASTS
THE PRINCIPLE ASSUMPTIONS FOR THIS RUN ARE FULL EMPLOYMENT AND .75% PRICES

VARIABLE NAME	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	ANNUALIZED COMPOUND GROWTH RATES,YEARS- 1-5	6-10	1-10
TABLE 1.1 -- GROSS NATIONAL PRODUCT IN CURRENT DOLLARS														
GROSS NATIONAL PRODUCT	974.1	1050.4	1150.7	1270.0	1379.2	1484.3	1613.3	1749.1	1890.3	2030.6	2192.3	9.03	7.97	8.51
CONSUMPTION EXPENDITURES	615.9	664.9	719.9	788.3	861.7	929.6	1005.6	1084.0	1165.9	1247.0	1331.7	8.74	7.28	8.01
DURABLE GOODS	104.7	101.3	108.2	117.4	127.7	136.0	150.3	161.1	172.0	182.0	193.1	7.81	6.47	7.13
NONDURABLE GOODS	264.7	288.6	303.0	329.4	354.4	374.5	397.9	421.8	445.6	469.2	493.4	7.48	5.52	6.46
SERVICES	262.5	283.0	307.9	341.5	379.6	418.3	457.4	501.0	548.2	595.0	645.2	10.26	8.98	9.58
GROSS PRIVATE INVESTMENT	136.6	152.3	177.3	203.5	219.0	233.0	258.9	287.4	314.1	341.5	369.0	11.22	9.32	10.35
FIXED INVESTMENT	133.0	149.1	167.5	187.9	205.2	223.0	246.9	272.2	298.0	326.3	354.0	10.59	9.42	10.07
NONRESIDENTIAL	109.3	107.6	121.0	141.4	163.1	180.2	199.2	217.5	237.1	259.2	280.7	13.77	8.95	11.23
STRUCTURES	36.0	38.5	42.9	51.0	59.9	67.7	77.5	87.2	97.7	109.9	122.0	15.15	12.01	13.66
EQUIPMENT	65.3	69.1	78.1	89.6	103.1	112.5	121.6	130.3	139.4	149.3	158.7	12.98	6.87	9.67
RESIDENTIAL STRUCTURES	31.7	41.5	46.4	46.5	42.1	42.0	47.0	54.7	61.7	67.1	73.3	.77	11.29	6.58
NONFARM	31.1	41.0	45.0	45.9	41.4	42.1	47.0	53.9	60.9	66.3	72.4	.70	11.39	6.53
CHANGE IN INVENTORIES	2.0	3.2	9.9	15.6	13.0	10.0	12.0	15.2	15.3	15.3	15.9	33.37	7.27	19.65
NET EXPORTS OF GOODS AND SERV	3.9	1.0	3.1	2.9	.6	-.3	-.4	-1.2	-1.2	.5	3.0	******	******	12.46
EXPORTS	62.9	67.9	72.1	78.0	83.6	90.0	96.7	104.4	113.0	123.7	135.2	7.30	8.73	7.95
IMPORTS	59.0	66.0	69.0	75.1	83.0	90.3	97.1	105.6	114.2	123.2	132.2	7.01	8.02	7.07
GOVERNMENT PURCHASES	219.4	232.6	258.3	275.4	298.0	322.1	349.4	378.9	411.5	448.9	487.0	8.40	8.70	8.57
FEDERAL	97.2	96.0	108.1	109.2	114.6	119.5	125.7	132.0	139.4	148.0	157.1	5.39	5.73	5.52
NATIONAL DEFENSE	75.3	72.0	74.0	79.4	81.5	83.6	87.1	90.5	94.3	98.1	102.1	3.02	4.05	3.05
OTHER	21.9	24.0	26.0	29.0	33.0	35.0	38.6	41.4	45.1	49.9	55.0	9.59	9.23	9.22
STATE AND LOCAL	122.2	135.7	150.2	166.2	183.4	202.6	223.6	246.9	272.1	300.9	330.7	10.53	10.27	10.39
TABLE 1.2 -- OTHER MAJOR ECONOMIC INDICATORS														
MONEY SUPPLY WITHOUT TIME DEP	212.5	224.4	239.5	257.4	279.4	307.4	337.0	368.4	399.0	428.3	456.4	8.19	7.01	8.20
MONEY SUPPLY WITH TIME DEPOSIT	420.6	470.1	526.3	574.1	636.0	704.1	772.1	845.4	921.3	998.3	1076.4	10.14	8.64	9.43
TREASURY BILL RATE, 91-DAY	6.44	4.34	4.68	5.11	4.58	4.54	4.77	4.83	4.88	5.03	5.23	1.13	2.37	2.11
CORPORATE BOND RATE, NEW ISSUE	9.05	7.90	7.95	7.68	7.20	6.99	7.07	7.03	7.05	7.13	7.27	-3.01	.69	-.91
INDEX OF INDUS PROD, TOTAL	106.5	106.7	114.3	122.3	128.4	131.9	140.0	147.2	154.0	161.2	168.6	5.44	4.75	5.21
INDEX OF INDUS PROD, MFG.	105.1	104.9	113.0	121.2	127.5	130.0	138.9	146.0	152.0	159.9	167.3	5.67	4.76	5.32
INDEX OF INDUS PROD, STEEL	106.0	96.2	101.7	115.7	118.6	117.9	123.0	131.3	144.1	151.0	159.5	5.20	6.71	5.77
INDEX OF CAPACITY UTILIZATION	82.7	81.8	85.9	89.3	91.0	90.2	91.1	91.8	92.1	92.5	92.0	2.48	.44	1.41
NEW PASSENGER CAR SALES,SAAR	8.44	10.33	11.21	11.73	12.02	12.10	12.89	13.26	13.63	13.97	14.26	4.22	2.57	3.65
TOTAL PRIVATE HOUSING STARTS	1.46	2.00	2.07	1.90	1.63	1.60	1.82	2.01	2.10	2.20	2.30	-4.71	6.60	1.04
GNP IN 1958 DOLLARS	720.0	742.0	787.9	835.7	873.0	901.4	944.6	988.7	1032.0	1078.6	1126.3	4.90	4.50	4.74
IMPLICIT GNP DEFLATOR	135.3	141.6	146.0	151.9	158.0	164.7	170.0	176.9	183.0	189.0	194.6	3.85	3.32	3.60
CONSUMER PRICE INDEX	116.3	121.2	125.0	130.4	136.6	143.0	148.4	154.2	159.9	165.5	170.7	4.22	3.55	3.88
WHSL PRICE INDEX (INDUS COMM)	110.0	114.0	116.3	118.5	121.1	124.5	127.1	129.1	130.9	132.2	133.3	2.22	1.19	1.74
PCT CHANGE IN GNP$ (ANN RATE)	6.70	7.83	9.56	10.37	8.59	7.62	8.69	8.41	8.00	7.84	7.54	-.44	-3.49	-.42
PCT CHANGE IN GNP58 (ANN RATE)	3.84	3.05	6.10	6.07	4.46	3.25	4.79	4.67	4.47	4.44	4.42	1.59	-2.01	4.19
PCT CHANGE IN GNP DEFLATOR	2.94	4.62	3.16	4.05	3.97	4.23	3.72	3.58	3.46	3.26	2.99	-2.19	-5.20	-4.72
PCT CHANGE IN CONS PRICE INDEX	4.30	4.19	3.12	4.37	4.71	4.68	3.83	3.87	3.73	3.45	3.16	2.82	-4.67	-3.87
DISPOSABLE PERSONAL INCOME	687.7	743.3	804.2	879.7	957.5	1027.5	1110.5	1193.0	1281.1	1370.2	1462.4	8.43	7.12	7.80
CORP PROFITS WITHOUT IVA ADJ.	75.3	81.7	96.5	110.6	125.0	136.3	149.7	160.9	173.0	188.4	204.1	13.64	8.86	10.70
UNEMPLOYMENT RATE	5.0	5.9	5.4	5.0	4.0	4.9	4.5	4.5	4.5	4.5	4.6	-4.75	.50	-2.05
PERSONAL SAVINGS RATE	7.0	8.0	7.9	7.9	7.5	7.0	6.9	6.6	6.4	6.3	6.2	-3.25	-2.53	-2.71
FEDERAL GOVT SURPLUS OR DEF	-13.7	-21.4	-18.9	-20.0	-16.1	-5.0	-3.2	0.7	7.9	9.2	9.1	******	******	******

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THIS FORECAST WAS PREPARED BY CHASE ECONOMETRICS, INC. ON DEC 1971 AND IS THE FORECAST IN A SET OF FORECASTS
THE PRINCIPLE ASSUMPTIONS FOR THIS RUN ARE FULL EMPLOYMENT AND .75% PRICES

VARIABLE NAME	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	ANNUALIZED COMPOUND GROWTH RATES,YEARS- 1-5	6-10	1-10
TABLE 2.1 -- GROSS NATIONAL PRODUCT IN CONSTANT DOLLARS														
GROSS NATIONAL PRODUCT	720.0	742.0	787.9	835.7	873.0	901.4	944.6	988.7	1032.8	1078.6	1126.3	4.98	4.50	4.74
CONSUMPTION EXPENDITURES	496.5	493.9	521.4	552.1	581.9	605.3	634.9	663.3	691.9	719.3	747.3	5.21	4.16	4.70
DURABLE GOODS	92.0	89.5	94.0	100.9	107.0	111.7	120.3	126.5	132.6	138.6	144.3	5.69	4.65	5.44
NONDURABLE GOODS	207.3	213.5	226.5	239.3	251.2	259.7	271.2	282.4	293.5	304.5	316.0	5.02	3.90	4.45
SERVICES	191.3	190.9	200.1	211.9	223.6	233.9	243.4	254.4	265.8	276.3	287.0	5.21	4.20	4.63
GROSS PRIVATE INVESTMENT	109.0	109.0	121.4	133.1	136.7	136.0	143.0	152.6	159.5	166.7	174.4	5.85	4.93	5.36
FIXED INVESTMENT	108.0	106.1	113.0	121.4	126.6	129.0	135.6	142.3	149.3	156.6	164.0	5.17	4.80	4.96
NONRESIDENTIAL	79.2	78.6	84.9	94.4	103.6	107.7	112.3	117.0	122.0	128.3	134.4	8.18	4.60	6.13
STRUCTURES	24.2	23.0	23.7	26.7	28.0	30.1	32.1	33.9	35.7	38.0	40.0	6.99	5.67	6.33
EQUIPMENT	54.4	55.6	61.3	67.7	74.8	77.6	80.2	83.1	86.3	90.4	94.4	8.67	4.17	6.84
RESIDENTIAL STRUCTURES	22.2	27.4	28.9	26.9	22.9	22.1	23.3	25.4	27.2	28.3	29.6	-5.31	6.16	.85
NONFARM	28.0	27.0	28.5	26.5	22.5	21.7	22.9	25.0	26.8	27.9	29.2	-5.39	6.26	.86
FARM	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.00	.00	.00
CHANGE IN INVENTORIES	1.3	2.9	7.6	11.7	10.1	7.1	8.3	10.3	10.2	10.0	10.3	24.86	5.77	15.14
NONFARM	2.0	2.2	7.5	11.7	10.1	7.1	8.3	10.3	10.2	10.0	10.3	33.21	5.77	18.49
FARM	.7	.7	.1	.0	.0	.0	.0	.0	.0	.0	.0	******	******	******
NET EXPORTS OF GOODS AND SERV	2.4	1.4	4.9	4.3	2.3	1.2	.7	-.1	-.5	-.3	.3	-5.39	-21.69	-17.21
EXPORTS	52.2	54.0	55.3	58.1	60.5	63.0	65.0	69.0	72.6	76.8	81.2	3.91	5.40	4.63
IMPORTS	49.8	52.6	50.4	53.8	58.2	61.8	65.1	69.2	73.2	77.1	81.0	4.13	5.60	4.91
GOVERNMENT PURCHASES	139.5	138.2	140.2	146.4	152.1	158.1	165.2	172.9	182.0	193.0	204.4	3.42	5.47	4.44
FEDERAL	65.4	61.2	58.9	60.1	60.0	61.6	63.4	64.9	67.2	70.3	73.7	.15	3.82	2.87
NATIONAL DEFENSE	50.7	45.5	43.6	43.7	43.2	43.1	43.9	44.5	45.4	46.6	47.9	-1.35	2.17	.56
OTHER	14.7	15.7	15.3	16.4	17.5	18.5	19.5	20.4	21.8	23.7	25.0	4.14	7.26	5.66
STATE AND LOCAL	77.0	77.0	81.3	86.2	91.3	96.5	101.8	108.0	114.8	122.7	130.7	5.82	6.45	6.06
TABLE 2.2 -- IMPLICIT PRICE DEFLATORS FOR GNP														
GROSS NATIONAL PRODUCT	135.3	141.5	146.0	151.9	158.0	164.7	170.0	176.9	183.0	189.0	194.6	3.85	3.32	3.60
CONSUMPTION EXPENDITURES	129.4	134.6	139.1	142.8	148.1	153.6	158.4	163.4	168.5	173.4	178.2	3.35	3.00	3.16
DURABLE GOODS	108.9	113.1	114.2	116.4	119.3	122.4	124.9	127.3	129.7	131.9	133.8	2.81	1.74	1.89
NONDURABLE GOODS	127.7	131.5	134.1	137.6	141.0	144.2	146.7	149.4	151.9	154.1	156.1	2.74	1.57	1.93
SERVICES	148.2	148.2	153.0	161.2	169.7	178.0	187.0	196.9	206.2	215.6	224.0	4.00	4.59	4.73
FIXED INVESTMENT	132.7	140.5	147.1	154.0	162.1	171.0	180.1	191.2	200.1	208.2	215.0	5.14	4.33	4.87
NONRESIDENTIAL	130.0	136.0	142.4	149.7	157.4	167.3	177.4	185.9	194.2	201.9	208.0	5.14	4.16	4.81
STRUCTURES	152.1	167.5	181.1	193.7	207.9	224.5	241.6	257.4	273.6	289.5	305.0	7.68	6.00	6.00
EQUIPMENT	120.1	124.1	127.5	132.3	137.9	145.0	151.7	156.8	161.5	165.1	168.1	3.97	2.59	3.42
RESIDENTIAL	142.4	151.2	160.7	172.0	183.6	194.0	204.7	215.5	226.4	237.1	247.3	6.43	4.84	5.61
NONFARM	142.4	151.3	160.0	173.0	183.0	194.3	205.0	215.9	226.0	237.4	247.7	6.45	4.84	5.62
FARM	138.6	145.2	155.0	163.0	171.0	179.0	185.5	195.0	203.0	211.0	219.0	5.36	4.24	4.66
CHANGE IN INVENTORIES	120.0	105.4	130.1	133.2	136.7	141.4	145.0	147.8	150.2	152.1	153.5	7.63	1.44	4.24
EXPORTS	125.2	125.6	130.4	134.3	138.3	142.0	147.0	151.2	155.6	161.0	166.4	3.27	3.14	3.17
IMPORTS	110.6	127.1	136.9	139.7	142.7	146.0	149.2	152.6	156.1	159.7	163.3	3.53	2.29	2.92
GOVERNMENT PURCHASES	157.4	168.3	178.6	188.1	195.9	203.7	211.5	219.2	226.1	232.5	238.6	4.88	3.87	3.95
FEDERAL	148.7	158.2	170.0	181.7	188.6	194.0	198.3	203.5	207.4	210.5	213.3	5.23	1.84	3.37
STATE AND LOCAL	165.0	176.3	184.0	192.7	200.7	209.0	219.6	228.6	237.1	245.2	252.9	4.44	3.59	4.00

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THIS FORECAST WAS PREPARED BY CHASE ECONOMETRICS, INC. ON DEC 1971 AND IS THE FORECAST IN A SET OF FORECASTS
THE PRINCIPLE ASSUMPTIONS FOR THIS RUN ARE FULL EMPLOYMENT AND PRICES AND GOVERNMENT OFFSET 75 PERCENT

VARIABLE NAME	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	ANNUALIZED COMPOUND GROWTH RATES,YEARS- 1-5	6-10	1-10
TABLE 1.1 -- GROSS NATIONAL PRODUCT IN CURRENT DOLLARS														
GROSS NATIONAL PRODUCT	974.1	1050.4	1158.7	1270.0	1382.3	1497.9	1635.3	1776.5	1919.7	2069.1	2227.3	9.28	8.03	8.70
CONSUMPTION EXPENDITURES	615.9	664.9	719.9	788.3	862.3	934.1	1017.4	1101.8	1186.9	1278.6	1356.2	8.07	7.45	8.23
DURABLE GOODS	104.7	101.3	108.2	117.4	127.8	137.6	151.7	162.9	174.0	185.0	195.7	7.96	6.58	7.59
NONDURABLE GOODS	264.7	288.6	303.8	329.4	354.7	376.5	402.6	427.8	452.1	475.9	500.5	7.62	5.59	6.63
SERVICES	262.5	283.0	307.9	341.5	379.8	426.1	463.1	511.0	560.9	609.7	660.0	10.38	9.26	9.86
GROSS PRIVATE INVESTMENT	136.6	152.3	177.3	203.5	219.3	235.3	262.5	290.6	315.4	341.8	371.0	11.49	9.03	10.39
FIXED INVESTMENT	133.8	149.1	167.5	187.9	205.4	224.5	249.1	274.4	300.4	327.2	355.4	10.77	9.29	10.12
NONRESIDENTIAL	109.3	107.6	121.0	141.4	163.3	181.0	201.0	220.0	240.6	262.7	284.5	14.01	8.97	11.40
STRUCTURES	36.0	38.5	42.9	51.0	60.0	67.0	77.0	87.7	98.5	111.0	123.3	15.20	12.20	13.79
EQUIPMENT	65.3	69.1	78.1	89.6	103.3	113.9	124.0	133.1	142.1	151.0	161.2	13.33	6.78	9.86
RESIDENTIAL STRUCTURES	31.7	41.5	46.4	46.5	42.1	42.7	47.3	53.7	59.0	64.4	70.9	.72	10.64	6.11
NONFARM	31.1	41.0	45.0	45.9	41.4	42.0	46.6	52.9	59.0	63.6	70.0	.65	10.74	6.13
CHANGE IN INVENTORIES	2.0	3.2	9.9	15.6	13.9	10.0	13.5	16.2	15.0	14.6	15.6	35.95	3.78	19.43
NET EXPORTS OF GOODS AND SERV	3.9	1.0	3.1	2.9	.5	-.7	-1.4	-2.0	-3.1	-1.3	1.3	******	******	2.63
EXPORTS	62.9	67.9	72.1	78.0	83.6	90.0	96.0	104.3	112.9	123.5	135.0	7.31	8.69	7.93
IMPORTS	59.0	66.0	69.0	75.1	83.1	90.7	98.1	107.2	116.0	124.0	133.7	7.93	8.04	8.00
GOVERNMENT PURCHASES	219.4	232.6	250.3	275.4	300.2	329.2	356.9	387.0	420.4	458.1	498.0	9.07	8.73	8.04
FEDERAL	97.2	96.0	100.1	109.2	114.6	119.5	125.7	132.6	140.0	149.7	159.1	5.39	6.07	5.67
NATIONAL DEFENSE	75.3	72.0	74.0	79.4	81.5	83.6	87.1	90.5	94.3	98.1	102.1	3.02	4.05	3.95
OTHER	21.9	24.0	26.0	29.0	33.0	35.0	38.6	42.0	46.5	51.6	57.1	9.59	10.23	9.67
STATE AND LOCAL	122.2	135.7	150.2	166.2	185.6	209.7	231.1	254.4	279.6	308.4	339.7	11.48	10.10	10.72
TABLE 1.2 -- OTHER MAJOR ECONOMIC INDICATORS														
MONEY SUPPLY WITHOUT TIME DEP	212.5	224.4	239.5	257.4	279.5	300.0	330.9	370.6	403.2	434.7	465.1	0.24	0.24	0.43
MONEY SUPPLY WITH TIME DEPOSIT	420.6	470.1	526.3	574.1	636.1	704.9	773.7	849.7	929.5	1010.2	1092.0	10.19	9.00	9.60
TREASURY BILL RATE, 91-DAY	6.44	4.34	4.60	5.11	4.50	4.50	4.91	4.97	5.01	5.17	5.35	1.37	2.10	2.36
CORPORATE BOND RATE, NEW ISSUE	9.05	7.90	7.95	7.60	7.19	7.01	7.14	7.12	7.17	7.29	7.43	-2.95	1.01	-.67
INDEX OF INDUS PROD, TOTAL	106.5	106.7	114.3	122.3	120.6	132.7	141.5	140.5	154.6	161.4	160.0	5.61	4.51	5.23
INDEX OF INDUS PROD, MFG.	105.1	104.9	113.0	121.2	127.6	131.7	140.4	147.3	153.3	160.1	167.5	5.04	4.51	5.33
INDEX OF INDUS PROD, STEEL	106.0	96.2	101.7	115.7	110.0	119.2	125.2	132.0	141.6	146.4	155.1	5.51	5.50	5.44
INDEX OF CAPACITY UTILIZATION	82.7	81.0	85.9	89.3	91.0	90.7	91.0	92.3	92.1	92.2	92.6	2.62	.21	1.39
NEW PASSENGER CAR SALES,SAAR	0.44	10.33	11.21	11.73	12.03	12.24	12.93	13.27	13.60	13.95	14.27	4.34	2.48	3.45
TOTAL PRIVATE HOUSING STARTS	1.46	2.00	2.07	1.90	1.63	1.66	1.70	1.94	2.00	2.14	2.26	-4.51	6.15	1.35
GNP IN 1958 DOLLARS	720.0	742.0	787.9	835.7	874.7	900.7	955.5	999.6	1040.7	1084.0	1131.6	5.20	4.32	4.00
IMPLICIT GNP DEFLATOR	135.3	141.6	146.0	151.9	158.0	164.0	171.1	177.7	184.0	190.9	196.0	3.00	3.56	3.73
CONSUMER PRICE INDEX	116.3	121.2	125.0	130.4	136.6	143.0	148.0	155.2	161.7	167.7	173.2	4.23	3.87	4.04
WHSL PRICE INDEX (INDUS COMM)	110.0	114.0	116.3	118.5	121.1	124.5	127.2	129.4	131.4	133.0	134.1	2.23	1.34	1.02
PCT CHANGE IN GNP$ (ANN RATE)	6.70	7.03	9.56	10.37	8.04	8.36	9.17	8.64	8.06	7.79	7.65	1.66	-4.45	-.26
PCT CHANGE IN GNP$A (ANN RATE)	3.04	3.05	6.10	6.07	4.66	3.09	5.15	4.61	4.12	4.16	4.39	6.24	-3.92	4.11
PCT CHANGE IN GNP DEFLATOR	2.94	4.62	3.16	4.05	4.00	4.30	3.02	3.06	3.70	3.40	3.12	-1.79	-4.93	-4.27
PCT CHANGE IN CONS PRICE INDEX	4.30	4.19	3.12	4.37	4.71	4.72	4.05	4.30	4.16	3.73	3.30	3.03	-4.90	-2.61
DISPOSABLE PERSONAL INCOME	687.7	743.3	004.2	079.7	959.1	1034.9	1126.3	1213.2	1303.7	1394.9	1409.2	0.43	7.23	0.02
CORP PROFITS WITHOUT IVA ADJ.	75.3	01.7	96.5	110.6	126.1	130.0	152.7	164.3	177.2	192.0	200.2	14.01	0.05	10.94
UNEMPLOYMENT RATE	5.0	5.9	5.4	5.0	4.0	4.0	4.4	4.4	4.5	4.5	4.6	-5.20	1.20	-2.07
PERSONAL SAVINGS RATE	7.0	0.0	7.9	7.9	7.6	7.2	7.2	6.6	6.4	6.3	6.3	-2.51	-3.31	-2.60
FEDERAL GOVT SURPLUS OR DEF	-13.7	-21.4	-10.9	-20.0	-17.0	-9.3	-10.3	1.4	.0	1.1	.9	******	******	******

THIS FORECAST WAS PREPARED BY CHASE ECONOMETRICS, INC. ON DEC 1971 AND IS THE FORECAST IN A SET OF FORECASTS
THE PRINCIPLE ASSUMPTIONS FOR THIS RUN ARE FULL EMPLOYMENT AND PRICES AND GOVERNMENT OFFSET 75 PERCENT

TABLE 2.1 -- GROSS NATIONAL PRODUCT IN CONSTANT DOLLARS

VARIABLE NAME	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	ANNUALIZED COMPOUND GROWTH RATES,YEARS- 1-5	6-10	1-10
GROSS NATIONAL PRODUCT	720.0	742.0	787.9	835.7	874.7	900.7	955.5	999.6	1040.7	1084.0	1131.6	5.20	4.32	4.80
CONSUMPTION EXPENDITURES	496.5	493.9	521.4	552.1	582.3	600.1	641.2	670.7	698.4	724.7	752.1	5.34	4.07	4.70
DURABLE GOODS	92.0	89.5	94.0	100.9	107.1	112.3	121.2	127.5	133.3	139.2	145.1	5.03	4.59	4.50
NONDURABLE GOODS	207.3	213.5	226.5	239.3	251.4	261.0	274.0	285.3	296.0	306.7	318.2	5.15	3.81	4.53
SERVICES	191.3	190.9	200.1	211.9	223.7	234.0	245.9	257.9	269.1	278.0	288.0	5.31	4.10	4.70
GROSS PRIVATE INVESTMENT	109.0	109.0	121.4	133.1	136.0	130.3	146.0	154.0	159.2	165.3	173.1	6.13	4.36	5.27
FIXED INVESTMENT	100.0	106.1	113.0	121.4	126.7	130.7	136.7	143.1	149.2	155.0	163.0	5.35	4.50	4.09
NONRESIDENTIAL	79.2	70.6	04.9	94.4	103.7	100.7	113.7	110.4	123.1	120.9	134.0	0.43	4.34	0.10
STRUCTURES	24.2	23.0	23.7	26.7	20.0	30.2	32.1	33.9	35.7	30.0	40.0	7.02	5.64	0.34
EQUIPMENT	54.4	55.6	01.3	07.7	74.9	70.5	01.0	00.5	07.4	91.0	94.0	0.99	3.02	0.09
RESIDENTIAL STRUCTURES	22.2	27.4	20.9	20.9	22.9	22.0	23.0	24.7	26.1	20.0	20.3	-0.39	5.20	.32
NONFARM	20.0	27.0	20.5	20.5	22.5	21.0	22.0	24.3	25.7	20.4	27.9	-5.47	5.37	.33
FARM	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.00	.00	.00
CHANGE IN INVENTORIES	1.3	2.9	7.0	11.7	10.2	7.0	9.3	10.9	9.9	9.5	10.1	27.24	2.16	14.02
NONFARM	2.0	2.2	7.5	11.7	10.2	7.0	9.3	10.9	9.9	9.5	10.1	35.76	2.16	10.17
FARM	.7	.7	.1	.0	.0	.0	.0	.0	.0	.0	.0	******	******	******
NET EXPORTS OF GOODS AND SERV	2.4	1.4	4.9	4.3	2.3	.9	-.0	-1.4	-2.1	-1.9	-1.3	-11.59	******	******
EXPORTS	52.2	54.0	55.3	50.1	00.5	03.0	05.0	00.0	72.2	74.2	00.5	3.91	5.10	4.52
IMPORTS	49.0	52.6	50.4	53.0	50.2	02.1	05.0	70.2	74.3	70.1	01.0	4.25	5.61	5.03
GOVERNMENT PURCHASES	139.5	130.2	140.2	140.4	153.2	101.5	100.5	170.2	105.2	190.0	207.0	3.97	5.37	4.03
FEDERAL	05.4	01.2	50.9	00.1	00.0	01.0	03.4	05.1	07.7	70.9	74.3	.15	4.06	2.10
NATIONAL DEFENSE	50.7	45.5	43.0	43.7	43.2	43.1	43.9	44.4	45.4	40.5	47.7	-1.35	2.00	.52
OTHER	14.7	15.7	15.3	10.4	17.5	10.5	19.5	20.0	22.4	24.4	20.7	4.13	0.15	4.04
STATE AND LOCAL	77.0	77.0	01.3	00.2	92.5	99.9	105.1	111.1	117.5	125.1	133.4	4.74	0.14	4.30

TABLE 2.2 -- IMPLICIT PRICE DEFLATORS FOR GNP

GROSS NATIONAL PRODUCT	135.3	141.6	146.0	151.9	158.0	164.0	171.1	177.7	184.4	190.9	196.0	3.00	3.56	3.73
CONSUMPTION EXPENDITURES	129.4	134.6	130.1	142.0	140.1	153.6	150.7	164.2	169.9	175.3	100.3	3.36	3.25	3.30
DURABLE GOODS	100.9	113.1	114.2	116.4	119.3	122.5	125.1	127.0	130.5	132.9	134.9	2.02	1.90	1.90
NONDURABLE GOODS	127.7	131.5	134.1	137.6	141.0	144.2	146.9	149.9	152.7	155.2	157.3	2.35	1.72	2.01
SERVICES	140.2	140.2	153.0	101.2	109.7	170.9	100.3	190.1	200.4	210.7	220.5	4.01	4.96	4.92
FIXED INVESTMENT	132.7	140.5	147.1	154.0	102.1	171.0	102.1	191.7	201.3	210.0	217.9	5.15	4.59	4.99
NONRESIDENTIAL	130.0	136.0	142.4	149.7	157.4	107.2	177.4	100.4	195.4	203.7	211.0	5.15	4.44	4.93
STRUCTURES	152.1	107.5	101.1	193.7	207.9	224.7	242.0	250.5	275.6	292.2	300.0	7.02	6.21	7.00
EQUIPMENT	120.1	124.1	127.5	132.3	137.9	145.1	151.9	157.4	102.0	100.0	170.1	3.90	2.00	3.56
RESIDENTIAL	142.4	151.2	100.7	172.0	103.0	194.3	205.0	217.3	229.0	240.2	250.0	6.47	5.10	5.79
NONFARM	142.4	151.3	100.0	173.0	103.9	194.0	205.9	217.7	229.4	240.0	251.3	6.49	5.10	5.79
FARM	130.0	145.2	155.0	103.0	171.0	179.0	105.5	195.0	203.0	211.0	219.0	5.30	4.24	4.00
CHANGE IN INVENTORIES	120.0	105.4	130.1	133.2	130.7	141.5	145.1	140.2	151.0	153.1	154.7	7.64	1.01	4.35
EXPORTS	125.2	125.6	130.4	134.3	130.3	142.0	147.1	151.6	150.4	102.1	107.7	3.27	3.33	3.20
IMPORTS	110.0	127.1	130.9	139.7	142.7	140.0	149.2	152.7	150.1	159.7	103.4	3.52	2.30	2.92
GOVERNMENT PURCHASES	157.4	100.3	170.0	100.1	195.9	203.0	211.7	219.7	220.4	233.7	240.1	4.90	3.19	4.02
FEDERAL	140.7	150.2	170.0	101.7	100.0	194.1	190.4	203.7	207.9	211.1	214.1	5.24	1.93	3.41
STATE AND LOCAL	105.0	176.3	104.0	192.7	200.7	209.9	219.0	229.0	230.9	246.5	254.5	4.45	3.73	4.14

A10

THIS FORECAST WAS PREPARED BY CHASE ECONOMETRICS, INC. ON DEC 1971 AND IS THE FORECAST IN A SET OF FORECASTS
THE PRINCIPLE ASSUMPTIONS FOR THIS RUN ARE FULL EMPLOYMENT AND 1.25%PRICES

VARIABLE NAME	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	ANNUALIZED COMPOUND GROWTH RATES,YEARS- 1-5	6-10	1-10
TABLE 1.1 -- GROSS NATIONAL PRODUCT IN CURRENT DOLLARS														
GROSS NATIONAL PRODUCT	974.1	1050.4	1152.4	1272.8	1381.8	1486.2	1613.2	1746.7	1885.7	2030.4	2180.5	9.07	7.82	8.45
CONSUMPTION EXPENDITURES	615.9	664.9	728.7	789.8	863.0	929.7	1003.4	1078.5	1156.9	1234.9	1315.2	8.74	7.88	7.86
DURABLE GOODS	104.7	101.3	108.4	117.4	127.5	136.6	150.2	161.1	171.9	182.4	192.4	7.78	6.38	7.39
NONDURABLE GOODS	264.7	288.6	304.1	330.0	354.9	374.6	397.6	420.6	443.5	466.1	489.6	7.49	5.34	6.37
SERVICES	262.5	283.0	308.2	342.3	380.6	418.4	455.6	496.8	541.5	586.4	633.1	10.27	8.58	9.35
GROSS PRIVATE INVESTMENT	136.6	152.3	178.4	205.0	221.1	235.7	261.4	290.3	318.1	345.8	373.9	11.54	9.37	10.49
FIXED INVESTMENT	133.8	149.1	168.4	189.4	207.4	226.6	258.8	275.1	302.5	330.1	357.6	11.93	9.36	10.28
NONRESIDENTIAL	109.3	107.6	122.8	143.4	166.8	185.2	203.3	220.1	239.4	261.4	283.1	14.54	8.63	11.34
STRUCTURES	36.8	38.5	42.9	52.8	60.4	68.4	78.4	87.7	97.9	110.1	122.2	15.46	11.75	13.68
EQUIPMENT	65.3	69.1	79.1	91.4	106.4	116.8	124.9	132.4	141.4	151.3	160.9	14.83	6.53	9.84
RESIDENTIAL STRUCTURES	31.7	41.5	46.4	46.8	40.6	41.4	46.7	55.8	63.1	68.8	74.5	-.89	12.36	6.78
NONFARM	31.1	41.8	45.8	45.3	39.9	40.7	46.8	54.2	62.3	67.9	73.6	-.17	12.47	6.72
CHANGE IN INVENTORIES	2.8	3.2	10.1	15.6	13.7	9.1	11.3	15.1	15.7	15.6	16.3	38.32	9.52	20.88
NET EXPORTS OF GOODS AND SERV	3.9	1.8	2.8	2.5	-.2	-1.2	-.8	-1.1	-.9	1.8	3.5	******	******	14.58
EXPORTS	62.9	67.9	72.1	78.8	83.6	89.5	96.7	104.3	113.1	123.7	135.3	7.28	8.77	7.96
IMPORTS	59.8	66.8	69.2	75.5	83.8	91.8	97.4	105.4	113.9	122.8	131.8	8.84	7.85	7.83
GOVERNMENT PURCHASES	219.4	232.6	250.3	275.4	298.8	322.1	349.4	378.9	411.5	448.9	487.8	8.48	8.78	8.57
FEDERAL	97.2	96.8	100.1	109.2	114.6	119.5	125.7	132.8	139.4	148.8	157.1	5.39	5.73	5.52
NATIONAL DEFENSE	75.3	72.8	74.8	79.4	81.5	83.6	87.1	90.5	94.3	98.1	102.1	3.82	4.85	3.95
OTHER	21.9	24.8	26.8	29.8	33.8	35.8	38.6	41.4	45.1	49.9	55.8	9.59	9.23	9.22
STATE AND LOCAL	122.2	135.7	150.2	166.2	183.4	202.6	223.6	246.9	272.1	300.9	330.7	10.53	10.27	10.39
TABLE 1.2 -- OTHER MAJOR ECONOMIC INDICATORS														
MONEY SUPPLY WITHOUT TIME DEP	212.5	224.4	239.5	257.4	279.1	306.5	336.1	365.9	395.9	424.6	451.9	8.11	7.68	8.88
MONEY SUPPLY WITH TIME DEPOSIT	428.6	478.1	526.7	575.2	638.1	727.2	775.5	848.8	925.2	1002.7	1081.3	10.28	8.67	9.48
TREASURY BILL RATE, 91-DAY	6.44	4.34	4.64	5.13	4.48	4.49	4.75	4.78	4.78	4.79	4.92	.87	.85	1.68
CORPORATE BOND RATE, NEW ISSUE	9.85	7.98	7.94	7.68	7.18	6.96	7.86	7.88	6.96	6.97	7.81	-3.12	-.18	-1.31
INDEX OF INDUS PROD, TOTAL	106.5	106.7	114.5	122.3	120.8	130.9	138.9	146.2	153.2	160.6	168.3	5.24	4.92	5.19
INDEX OF INDUS PROD, MFG.	105.1	104.9	113.2	121.4	127.1	129.9	137.7	144.9	151.9	159.3	166.9	5.47	4.93	5.29
INDEX OF INDUS PROD, STEEL	106.8	96.2	101.5	114.7	115.6	113.3	118.2	127.9	142.5	150.7	159.9	4.16	7.85	5.88
INDEX OF CAPACITY UTILIZATION	82.7	81.8	86.8	89.4	98.4	89.4	98.4	91.3	91.8	92.3	92.9	2.27	.66	1.61
NEW PASSENGER CAR SALES,SAAR	8.44	10.33	11.23	11.69	11.75	11.83	12.58	13.83	13.46	13.85	14.17	3.46	3.84	3.58
TOTAL PRIVATE HOUSING STARTS	1.46	2.08	2.87	1.86	1.55	1.61	1.78	2.83	2.23	2.33	2.42	-5.25	7.98	2.12
GNP IN 1958 DOLLARS	728.8	742.8	788.6	835.8	870.8	896.4	937.9	982.3	1028.8	1074.9	1123.7	4.84	4.62	4.71
IMPLICIT GNP DEFLATOR	135.3	141.6	146.1	152.3	158.7	165.8	172.8	177.8	183.4	188.9	194.8	4.83	3.86	3.56
CONSUMER PRICE INDEX	116.3	121.2	125.1	130.8	137.3	143.9	149.1	154.4	159.5	164.4	169.4	4.38	3.18	3.76
WHSL PRICE INDEX (INDUS COMM)	110.8	114.8	116.4	118.9	121.9	126.8	128.8	130.7	132.2	133.4	134.3	2.53	1.85	1.83
PCT CHANGE IN GNP$ (ANN RATE)	6.78	7.83	9.72	10.45	8.56	7.56	8.55	8.27	7.96	7.67	7.39	-.88	-3.57	-.64
PCT CHANGE IN GNP58 (ANN RATE)	3.84	3.85	6.28	5.99	4.19	2.94	4.62	4.74	4.65	4.54	4.54	-.98	-.45	4.58
PCT CHANGE IN GNP DEFLATOR	2.94	4.62	3.22	4.21	4.28	4.48	3.75	3.38	3.17	2.98	2.73	-.76	-7.64	-5.69
PCT CHANGE IN CONS PRICE INDEX	4.38	4.19	3.22	4.56	4.98	4.79	3.66	3.51	3.32	3.06	2.82	3.43	-6.33	-4.38
DISPOSABLE PERSONAL INCOME	687.7	743.3	806.9	881.2	958.8	1027.2	1108.5	1188.8	1272.6	1357.9	1446.8	8.42	6.89	7.67
CORP PROFITS WITHOUT IVA ADJ.	75.3	81.7	97.1	111.4	127.8	138.1	150.7	161.2	174.2	188.4	204.1	14.82	7.87	10.78
UNEMPLOYMENT RATE	5.8	5.9	5.4	5.8	4.9	5.8	4.6	4.6	4.7	4.6	4.6	-4.24	.25	-2.48
PERSONAL SAVINGS RATE	7.8	8.8	7.9	7.9	7.4	7.8	6.9	6.6	6.5	6.4	6.4	-3.48	-2.89	-2.49
FEDERAL GOVT SURPLUS OR DEF	-13.7	-21.4	-18.5	-28.2	-15.5	-5.1	-3.1	8.1	6.7	7.4	6.7	******	******	******

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THIS FORECAST WAS PREPARED BY CHASE ECONOMETRICS, INC. ON DEC 1971 AND IS THE FORECAST IN A SET OF FORECASTS
THE PRINCIPLE ASSUMPTIONS FOR THIS RUN ARE FULL EMPLOYMENT AND 1.25%PRICES

VARIABLE NAME	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	ANNUALIZED COMPOUND GROWTH RATES,YEARS- 1-5	6-10	1-10
TABLE 2.1 -- GROSS NATIONAL PRODUCT IN CONSTANT DOLLARS														
GROSS NATIONAL PRODUCT	720.0	742.0	788.6	835.8	870.0	896.4	937.9	982.3	1028.0	1074.9	1123.7	4.84	4.62	4.71
CONSUMPTION EXPENDITURES	496.5	493.9	521.6	551.9	580.7	602.0	631.7	659.8	688.6	716.2	744.5	5.10	4.19	4.66
DURABLE GOODS	92.0	89.5	94.9	100.7	104.3	110.9	119.6	126.1	132.3	138.3	144.0	5.49	4.76	5.42
NONDURABLE GOODS	207.3	213.5	226.5	239.2	250.7	258.6	269.9	280.9	292.4	303.0	314.6	4.91	3.98	4.44
SERVICES	191.3	190.9	200.2	212.1	223.6	232.3	242.2	252.8	264.3	274.9	285.9	5.14	4.24	4.[illegible]
GROSS PRIVATE INVESTMENT	109.0	109.0	122.2	133.7	137.2	136.6	142.7	151.7	159.6	167.2	175.2	5.89	5.2[illegible]	-.41
FIXED INVESTMENT	108.0	106.1	114.4	122.0	127.3	130.2	135.0	141.6	149.3	157.0	164.7	5.26	5.10	5.01
NONRESIDENTIAL	79.2	78.6	85.6	95.5	105.2	109.0	112.3	116.2	121.3	127.9	134.3	8.59	4.58	6.12
STRUCTURES	24.2	23.0	23.7	26.7	28.7	29.9	31.0	33.4	35.2	37.5	39.7	6.81	5.71	6.24
EQUIPMENT	54.4	55.6	61.9	68.0	76.5	79.0	80.5	82.7	86.1	90.3	94.6	9.10	4.12	6.07
RESIDENTIAL STRUCTURES	27.2	27.4	28.0	26.5	22.1	21.2	22.7	25.5	27.0	29.2	30.4	-6.23	7.55	1.14
NONFARM	28.0	27.0	28.4	26.1	21.7	20.0	22.3	25.1	27.5	28.0	30.0	-6.33	7.67	1.16
FARM	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.00	.00	.00
CHANGE IN INVENTORIES	1.3	2.9	7.7	11.7	9.9	6.3	7.7	10.1	10.3	10.2	10.5	21.57	8.19	15.36
NONFARM	2.0	2.2	7.6	11.7	9.9	6.3	7.7	10.1	10.3	10.2	10.5	29.69	8.19	18.72
FARM	.7	.7	.1	.0	.0	.0	.0	.0	.0	.0	.0	******	******	******
NET EXPORTS OF GOODS AND SERV	2.4	1.4	4.7	3.9	1.6	.3	.2	-.2	-.4	.1	.9	-32.26	49.22	-5.20
EXPORTS	52.2	54.0	55.3	58.0	60.3	62.7	65.5	68.9	72.7	77.0	81.6	3.78	5.65	4.69
IMPORTS	49.0	52.6	50.6	54.1	58.7	62.4	65.3	69.1	73.0	76.9	80.7	4.35	5.44	4.87
GOVERNMENT PURCHASES	139.5	138.2	140.1	146.1	151.5	156.5	163.4	170.9	180.2	191.4	203.0	3.22	5.57	4.36
FEDERAL	65.4	61.2	58.9	60.1	60.6	61.2	62.9	64.3	66.7	69.9	73.3	.00	3.00	2.01
NATIONAL DEFENSE	50.7	45.5	43.6	43.6	43.1	42.9	43.6	44.1	45.1	46.3	47.6	-1.49	2.24	.50
OTHER	14.7	15.7	15.3	16.4	17.5	18.4	19.3	20.2	21.6	23.5	25.7	3.00	7.32	5.63
STATE AND LOCAL	77.0	77.0	81.2	86.1	90.9	95.6	100.5	106.6	113.5	121.6	129.7	5.58	6.59	6.06
TABLE 2.2 -- IMPLICIT PRICE DEFLATORS FOR GNP														
GROSS NATIONAL PRODUCT	135.3	141.6	146.1	152.3	158.7	165.0	172.0	177.0	183.4	188.9	194.0	4.03	3.06	3.56
CONSUMPTION EXPENDITURES	129.4	134.6	138.2	143.1	148.6	154.2	158.0	163.4	168.0	172.4	176.6	3.46	2.69	3.06
DURABLE GOODS	108.9	113.1	114.2	116.6	119.8	123.2	125.6	127.8	129.9	131.9	133.6	2.17	1.55	1.87
NONDURABLE GOODS	127.7	131.5	134.3	137.9	141.6	144.9	147.3	149.7	151.9	153.8	155.6	2.46	1.39	1.89
SERVICES	148.2	148.2	153.9	161.4	170.2	179.3	188.1	196.5	204.9	213.3	221.4	4.00	4.16	4.58
FIXED INVESTMENT	132.7	140.5	147.1	155.2	163.0	174.0	185.1	194.2	202.6	210.2	217.1	5.40	4.06	4.94
NONRESIDENTIAL	130.0	136.0	142.5	150.2	158.5	169.9	181.0	189.5	197.3	204.4	210.0	5.57	3.00	4.02
STRUCTURES	152.1	147.5	151.4	164.6	210.0	228.5	246.6	262.3	277.9	293.2	308.0	8.07	5.72	6.99
EQUIPMENT	122.1	124.1	127.6	132.9	139.2	147.7	155.1	160.0	164.3	167.5	170.0	4.44	2.32	3.55
RESIDENTIAL	142.4	151.2	160.9	173.3	184.3	195.0	205.5	215.0	225.0	235.6	244.9	6.56	4.49	5.50
NONFARM	142.4	151.3	161.0	173.4	184.6	195.3	205.9	216.1	226.2	235.9	245.2	6.59	4.47	5.51
FARM	138.6	145.2	155.0	163.0	171.0	179.0	185.5	195.0	203.0	211.0	219.0	5.36	4.24	4.66
CHANGE IN INVENTORIES	124.0	125.4	130.3	133.7	137.9	143.5	147.4	149.9	152.1	153.7	154.9	0.82	1.25	4.37
EXPORTS	125.2	125.6	130.4	134.5	138.7	143.5	147.6	151.5	155.6	160.7	165.0	3.38	2.95	3.13
IMPORTS	118.6	127.1	136.9	139.7	142.7	146.0	149.1	152.6	156.0	159.6	163.3	3.53	2.29	2.92
GOVERNMENT PURCHASES	157.4	168.3	178.6	188.5	196.7	205.3	213.0	221.6	229.6	234.5	240.3	5.00	2.97	4.03
FEDERAL	160.7	158.2	170.1	181.9	189.2	195.2	199.9	205.2	208.9	211.0	214.5	5.39	1.70	3.63
STATE AND LOCAL	155.0	176.3	184.9	193.1	201.7	211.0	222.5	231.6	239.0	247.6	254.9	4.68	3.66	4.17

THIS FORECAST WAS PREPARED BY CHASE ECONOMETRICS, INC. ON DEC 1971 AND IS THE FORECAST IN A SET OF FORECASTS
THE PRINCIPLE ASSUMPTIONS FOR THIS RUN ARE FULL EMPLOYMENT AND PRICES AND GOVERNMENT OFFSET 125 PERCENT

VARIABLE NAME	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	ANNUALIZED COMPOUND GROWTH RATES,YEARS- 1-5	6-10	1-10
TABLE 1.1 -- GROSS NATIONAL PRODUCT IN CURRENT DOLLARS														
GROSS NATIONAL PRODUCT	974.1	1050.4	1152.4	1272.0	1387.5	1509.5	1650.1	1794.0	1941.5	2096.2	2260.6	9.49	8.19	8.80
CONSUMPTION EXPENDITURES	615.9	664.9	729.7	789.0	864.3	930.1	1024.2	1110.3	1198.2	1286.4	1377.7	8.99	7.69	8.42
DURABLE GOODS	104.7	101.3	108.4	117.4	127.0	130.0	152.7	164.5	176.3	188.0	199.3	8.05	6.80	7.81
NONDURABLE GOODS	264.7	280.6	304.1	330.0	355.5	378.3	405.7	431.2	456.1	481.1	507.0	7.75	5.74	6.79
SERVICES	262.5	283.0	309.2	342.3	381.0	421.9	465.0	514.6	565.0	617.3	671.3	10.50	9.57	10.06
GROSS PRIVATE INVESTMENT	136.6	152.3	170.4	205.0	221.5	239.3	266.7	295.2	321.2	340.2	377.3	11.96	9.86	10.60
FIXED INVESTMENT	133.0	149.1	168.4	189.4	207.0	220.0	252.9	270.5	305.6	333.0	361.3	11.29	9.32	10.32
NONRESIDENTIAL	109.3	107.6	122.0	143.4	167.1	197.0	207.6	225.7	246.0	269.4	292.7	14.95	8.97	11.75
STRUCTURES	36.0	30.5	42.9	52.0	60.4	60.6	70.0	80.7	90.6	102.6	125.6	15.55	12.35	14.02
EQUIPMENT	65.3	69.1	79.1	91.4	106.7	119.1	120.0	137.0	146.4	156.0	167.1	14.61	6.74	10.31
RESIDENTIAL STRUCTURES	31.7	41.5	46.4	46.0	40.6	41.0	45.4	52.0	59.6	63.6	68.6	-.36	10.07	5.72
NONFARM	31.1	41.0	45.0	45.3	39.9	40.2	44.6	52.0	50.0	62.7	67.7	-.44	10.97	5.73
CHANGE IN INVENTORIES	2.0	3.2	10.1	15.6	13.0	10.5	13.7	16.7	15.6	15.2	16.1	35.21	3.90	19.79
NET EXPORTS OF GOODS AND SERV	3.9	1.0	2.0	2.5	-.3	-1.0	-2.5	-3.9	-4.3	-2.0	-.5	******	******	******
EXPORTS	62.9	67.9	72.1	78.0	83.6	89.9	96.7	104.2	112.0	123.3	134.0	7.29	8.60	7.92
IMPORTS	59.0	66.0	69.2	75.5	83.0	91.0	99.1	108.1	117.0	126.1	135.3	8.25	8.09	8.14
GOVERNMENT PURCHASES	219.4	232.6	250.3	275.4	301.7	333.9	361.9	392.4	426.3	464.3	506.2	9.46	8.75	9.02
FEDERAL	97.2	96.0	100.1	109.2	114.6	119.5	125.7	132.9	141.7	150.0	160.5	5.39	6.30	5.77
NATIONAL DEFENSE	75.3	72.0	74.0	79.4	81.5	83.6	87.1	90.5	94.3	90.1	102.1	3.92	4.05	3.95
OTHER	21.9	24.0	26.0	29.0	33.0	35.0	38.6	42.4	47.4	52.7	50.4	9.59	10.89	9.96
STATE AND LOCAL	122.2	135.7	150.2	166.2	187.1	214.4	236.1	259.4	284.6	313.4	345.7	12.11	10.00	10.93
TABLE 1.2 -- OTHER MAJOR ECONOMIC INDICATORS														
MONEY SUPPLY WITHOUT TIME DEP	212.5	224.4	239.5	257.4	279.3	307.5	330.0	369.9	403.6	436.3	468.2	8.20	8.49	8.51
MONEY SUPPLY WITH TIME DEPOSIT	420.6	470.1	526.7	575.2	630.3	700.6	770.1	850.1	939.4	1023.7	1109.4	10.34	9.27	9.79
TREASURY BILL RATE, 91-DAY	6.44	4.34	4.64	5.13	4.50	4.50	5.02	5.02	4.90	5.15	5.33	1.37	1.55	2.32
CORPORATE BOND RATE, NEW ISSUE	9.05	7.90	7.94	7.60	7.10	7.00	7.19	7.17	7.19	7.31	7.43	-2.99	.04	-.67
INDEX OF INDUS PROD, TOTAL	100.5	100.7	110.5	122.0	120.3	132.3	141.2	140.2	154.5	161.4	160.6	5.54	4.53	5.21
INDEX OF INDUS PROD, MFG.	105.1	104.9	113.2	127.4	127.4	131.4	140.1	147.0	153.2	160.1	167.3	5.70	4.53	5.31
INDEX OF INDUS PROD, STEEL	100.0	90.2	101.5	114.7	115.0	115.2	121.0	120.2	137.9	142.1	149.3	4.61	5.41	5.00
INDEX OF CAPACITY UTILIZATION	02.7	01.0	00.0	09.4	90.0	90.3	91.5	92.2	92.4	92.0	93.0	2.52	.41	1.45
NEW PASSENGER CAR SALES,SAAR	0.44	10.33	11.23	11.69	11.00	11.94	12.65	13.09	13.53	13.93	14.24	3.70	3.00	3.63
TOTAL PRIVATE HOUSING STARTS	1.46	2.00	2.07	1.06	1.55	1.57	1.60	1.09	2.04	2.00	2.14	-5.05	6.14	.73
GNP IN 1958 DOLLARS	720.0	742.0	700.6	035.0	074.0	900.0	955.6	1000.2	1042.6	1006.0	1132.4	5.20	4.34	4.00
IMPLICIT GNP DEFLATOR	135.3	141.6	146.1	152.3	158.7	166.1	172.7	179.3	186.2	193.0	199.6	4.07	3.69	3.09
CONSUMER PRICE INDEX	116.3	121.2	125.1	130.0	137.3	144.0	149.9	156.3	162.9	169.4	175.7	4.41	4.05	4.21
WHSL PRICE INDEX (INDUS COMM)	110.0	114.0	116.4	110.9	121.9	126.0	129.0	131.2	133.3	135.0	136.5	2.53	1.42	2.01
PCT CHANGE IN GNP$ (ANN RATE)	6.70	7.03	9.72	10.45	9.01	0.79	9.32	0.72	0.22	7.96	7.85	2.95	-4.20	.03
PCT CHANGE IN GNP58 (ANN RATE)	3.04	3.05	6.20	5.99	4.56	3.99	5.15	4.67	4.24	4.17	4.27	0.09	-4.54	3.00
PCT CHANGE IN GNP DEFLATOR	2.94	4.62	3.22	4.21	4.26	4.62	3.96	3.00	3.03	3.64	3.43	-.03	-3.55	-3.26
PCT CHANGE IN CONS PRICE INDEX	4.30	4.19	3.22	4.56	4.90	4.90	4.00	4.27	4.23	3.90	3.73	4.92	-2.21	-1.27
DISPOSABLE PERSONAL INCOME	007.7	743.3	004.9	001.2	961.2	1040.3	1135.7	1223.0	1316.9	1412.2	1511.1	0.77	7.40	0.19
CORP PROFITS WITHOUT IVA ADJ.	75.3	01.7	97.1	111.4	127.5	141.1	155.0	167.2	101.2	197.0	214.2	14.44	0.29	11.29
UNEMPLOYMENT RATE	5.0	5.9	5.4	5.0	4.9	4.0	4.4	4.4	4.4	4.4	4.4	-5.06	.33	-3.20
PERSONAL SAVINGS RATE	7.0	0.0	7.9	7.9	7.6	7.3	7.3	6.7	6.4	6.3	6.2	-2.19	-4.15	-2.01
FEDERAL GOVT SURPLUS OR DEF	-13.7	-21.4	-10.5	-20.2	-16.9	-10.7	-14.7	-3.5	-4.7	-2.7	-1.9	******	******	******

THIS FORECAST WAS PREPARED BY CHASE ECONOMETRICS, INC. ON DEC 1971 AND IS THE FORECAST IN A SET OF FORECASTS
THE PRINCIPLE ASSUMPTIONS FOR THIS RUN ARE FULL EMPLOYMENT AND PRICES AND GOVERNMENT OFFSET 125 PERCENT

VARIABLE NAME	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	ANNUALIZED COMPOUND GROWTH RATES, YEARS- 1-5	6-10	1-10
TABLE 2.1 -- GROSS NATIONAL PRODUCT IN CONSTANT DOLLARS														
GROSS NATIONAL PRODUCT	720.0	742.0	788.6	835.0	874.0	900.0	955.6	1000.2	1042.6	1086.0	1132.4	5.20	4.34	4.80
CONSUMPTION EXPENDITURES	496.5	493.9	521.6	551.9	581.5	607.7	642.1	672.6	701.2	728.3	755.7	5.32	4.16	4.83
DURABLE GOODS	92.0	89.5	94.9	100.7	106.6	111.9	121.2	127.8	134.1	140.2	146.0	5.73	4.77	5.59
NONDURABLE GOODS	207.3	213.5	226.5	239.2	251.1	260.9	274.6	286.1	296.9	307.9	319.3	5.15	3.84	4.57
SERVICES	191.3	190.9	200.2	212.1	223.0	234.9	246.3	258.7	270.2	280.3	290.4	5.32	4.20	4.77
GROSS PRIVATE INVESTMENT	109.0	109.0	122.2	133.7	137.5	130.9	145.0	153.7	159.1	165.1	172.1	6.25	4.24	5.20
FIXED INVESTMENT	100.0	106.1	114.4	122.0	127.5	131.5	136.5	142.6	149.0	155.3	162.0	5.53	4.37	4.91
NONRESIDENTIAL	79.2	70.6	85.6	95.5	105.4	110.6	114.6	110.5	123.2	129.2	135.1	8.90	4.20	6.20
STRUCTURES	24.2	23.0	23.7	26.7	20.0	30.0	31.0	33.5	35.3	37.6	39.6	6.07	5.63	6.22
EQUIPMENT	54.4	55.6	61.9	60.0	76.7	00.6	02.0	05.0	07.9	01.6	05.5	9.72	3.64	6.10
RESIDENTIAL STRUCTURES	22.2	27.4	20.0	26.5	22.0	20.9	21.9	24.1	25.0	26.1	26.0	-6.55	5.23	-.25
NONFARM	20.0	27.0	20.4	26.1	21.6	20.5	21.5	23.7	25.4	25.7	26.4	-6.66	5.32	-.26
FARM	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.00	.00	.00
CHANGE IN INVENTORIES	1.3	2.9	7.7	11.7	10.0	7.4	9.3	11.1	10.2	9.7	10.2	26.11	2.27	14.91
NONFARM	2.0	2.2	7.6	11.7	10.0	7.4	9.3	11.1	10.2	9.7	10.2	34.54	2.27	10.26
FARM	.7	.7	.1	.0	.0	.0	.0	.0	.0	.0	.0	******	******	******
NET EXPORTS OF GOODS AND SERV	2.4	1.4	4.7	3.9	1.5	-.2	-1.1	-2.4	-3.2	-3.3	-3.1	******	******	******
EXPORTS	52.2	54.0	55.3	50.0	60.3	62.6	65.3	60.4	71.7	75.6	79.7	3.77	5.10	4.42
IMPORTS	49.0	52.6	50.6	54.1	50.7	62.0	66.4	70.0	74.9	70.9	02.0	4.56	5.66	5.17
GOVERNMENT PURCHASES	139.5	130.2	140.1	146.1	153.3	162.4	160.9	176.3	105.4	195.9	207.7	4.12	5.31	4.63
FEDERAL	65.4	61.2	50.9	60.1	60.6	61.2	62.9	64.7	67.5	70.0	74.2	.00	4.22	2.16
NATIONAL DEFENSE	50.7	45.5	43.6	43.6	43.1	42.9	43.5	44.1	45.0	46.0	47.2	-1.49	2.02	.40
OTHER	14.7	15.7	15.3	16.4	17.5	10.4	19.3	20.6	22.6	24.7	27.0	3.90	0.72	6.20
STATE AND LOCAL	77.0	77.0	01.2	06.1	92.7	101.2	106.0	111.6	117.9	125.2	133.5	7.00	5.94	6.30
TABLE 2.2 -- IMPLICIT PRICE DEFLATORS FOR GNP														
GROSS NATIONAL PRODUCT	135.3	141.6	146.1	152.3	158.7	166.1	172.7	179.3	186.2	193.0	199.6	4.07	3.69	3.89
CONSUMPTION EXPENDITURES	129.4	134.6	138.2	143.1	148.6	154.4	159.5	165.1	170.9	176.6	182.3	3.48	3.48	3.42
DURABLE GOODS	108.9	113.1	114.2	116.6	119.9	123.3	126.1	128.7	131.5	134.1	136.5	2.19	2.02	2.11
NONDURABLE GOODS	127.7	131.5	134.3	137.9	141.6	145.0	147.7	150.7	153.6	156.3	158.0	2.47	1.03	2.12
SERVICES	140.2	140.2	153.9	161.4	170.2	179.6	189.1	198.9	209.4	220.2	231.1	4.91	5.15	5.06
FIXED INVESTMENT	132.7	140.5	147.1	155.2	163.0	173.9	105.3	195.3	205.1	214.3	223.0	5.46	4.75	5.20
NONRESIDENTIAL	130.0	136.0	142.5	150.2	150.5	169.7	101.1	190.4	199.6	200.4	216.6	5.54	4.50	5.23
STRUCTURES	152.1	167.5	101.4	194.6	210.1	220.7	247.5	264.5	202.0	299.5	316.0	0.10	6.37	7.33
EQUIPMENT	120.1	124.1	127.6	132.9	139.2	147.0	155.5	161.2	166.5	171.1	175.0	4.45	2.99	3.00
RESIDENTIAL	142.4	151.2	160.9	173.3	104.4	195.6	207.3	219.3	231.4	243.6	255.5	6.65	5.37	5.99
NONFARM	142.4	151.3	161.0	173.4	104.7	195.9	207.7	219.7	231.9	244.1	256.0	6.67	5.30	6.01
FARM	130.6	145.2	155.0	163.0	171.0	179.0	105.5	195.0	203.0	211.0	219.0	5.36	4.24	4.66
CHANGE IN INVENTORIES	120.0	105.4	130.3	133.7	137.9	143.5	147.6	150.7	153.6	155.9	157.9	0.03	1.70	4.59
EXPORTS	125.2	125.6	130.4	134.5	130.7	143.5	147.9	152.3	157.2	163.0	169.1	3.39	3.40	3.35
IMPORTS	110.6	127.1	136.9	139.7	142.7	146.0	149.2	152.7	156.1	159.7	163.4	3.52	2.30	2.03
GOVERNMENT PURCHASES	157.4	160.3	170.6	100.5	196.0	205.6	214.3	222.5	229.9	236.9	243.7	5.12	3.27	4.19
FEDERAL	140.7	150.2	170.1	101.9	109.2	195.2	200.0	205.5	209.7	213.1	216.4	5.19	1.99	3.53
STATE AND LOCAL	165.0	176.3	104.9	193.1	201.7	211.0	222.0	232.4	241.5	250.4	250.9	4.69	3.03	4.35

THIS FORECAST WAS PREPARED BY CHASE ECONOMETRICS, INC. ON DEC 1971 AND IS THE FORECAST IN A SET OF FORECASTS
THE PRINCIPLE ASSUMPTIONS FOR THIS RUN ARE FULL EMPLOYMENT AND 1.5% PRICES

VARIABLE NAME	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	ANNUALIZED COMPOUND GROWTH RATES,YEARS- 1-5	6-10	1-10
TABLE 1.1 -- GROSS NATIONAL PRODUCT IN CURRENT DOLLARS														
GROSS NATIONAL PRODUCT	974.1	1050.4	1153.9	1274.3	1384.3	1488.5	1613.6	1745.8	1884.1	2027.5	2175.3	9.11	7.75	8.42
CONSUMPTION EXPENDITURES	615.9	664.9	721.4	798.9	864.8	931.3	1003.4	1076.4	1152.9	1229.2	1307.5	8.79	6.84	7.80
DURABLE GOODS	104.7	101.3	108.5	117.4	127.6	136.6	150.2	161.1	171.9	182.3	192.1	7.78	6.35	7.07
NONDURABLE GOODS	264.7	280.6	304.4	338.4	355.5	375.2	397.7	420.1	442.6	464.8	487.8	7.53	5.24	6.33
SERVICES	262.5	283.8	308.5	343.8	381.7	419.5	455.6	495.2	539.4	582.1	627.6	10.34	8.34	9.24
GROSS PRIVATE INVESTMENT	136.6	152.3	179.6	205.7	222.2	237.8	262.1	291.5	324.4	348.3	376.1	11.78	9.45	10.56
FIXED INVESTMENT	133.8	149.1	169.3	198.8	208.5	228.3	251.3	276.5	304.5	332.3	359.6	11.23	9.36	10.26
NONRESIDENTIAL	109.3	107.6	123.8	144.5	168.9	188.8	205.4	221.4	240.5	262.4	284.2	14.97	8.47	11.39
STRUCTURES	36.8	38.5	43.8	52.2	60.7	68.9	78.8	88.8	98.8	110.1	122.3	15.65	11.68	13.68
EQUIPMENT	65.3	69.1	80.8	92.3	108.2	119.1	126.5	133.4	142.5	152.4	162.8	14.59	6.37	9.92
RESIDENTIAL STRUCTURES	31.7	41.5	46.3	45.6	39.6	40.3	46.8	55.1	64.8	69.9	75.3	-.77	13.12	6.83
NONFARM	31.1	41.8	45.7	44.9	39.8	39.6	45.3	54.3	63.2	69.1	74.4	-.87	13.25	6.86
CHANGE IN INVENTORIES	2.8	3.2	10.3	15.6	13.6	8.8	10.7	14.9	15.9	16.0	16.6	29.89	11.51	20.20
NET EXPORTS OF GOODS AND SERV	3.9	1.8	2.6	2.2	-.7	-1.7	-1.1	-1.8	-.7	1.2	3.7	******	******	15.35
EXPORTS	62.9	67.9	72.1	78.8	83.6	89.8	96.6	104.3	113.8	123.8	135.4	7.27	8.81	7.97
IMPORTS	59.8	66.8	69.5	75.8	84.2	91.6	97.6	105.3	113.7	122.6	131.6	8.19	7.75	7.81
GOVERNMENT PURCHASES	219.4	232.6	258.3	275.4	298.8	322.1	349.4	378.9	411.5	448.9	487.8	8.48	8.78	8.57
FEDERAL	97.2	96.8	108.1	109.2	114.6	119.5	125.7	132.8	139.4	148.8	157.1	5.39	5.73	5.52
NATIONAL DEFENSE	75.3	72.8	74.8	79.4	81.5	83.6	87.1	90.5	94.3	98.1	102.1	3.92	4.85	3.95
OTHER	21.9	24.8	26.8	29.8	33.8	35.8	38.6	41.4	45.1	49.9	55.8	9.59	9.23	9.22
STATE AND LOCAL	122.2	135.7	150.2	166.2	183.4	202.6	223.6	246.9	272.1	300.9	330.7	10.53	10.27	10.39
TABLE 1.2 -- OTHER MAJOR ECONOMIC INDICATORS														
MONEY SUPPLY WITHOUT TIME DEP	212.5	224.4	239.5	257.3	279.8	306.1	335.2	364.8	394.3	422.7	449.7	8.88	7.62	8.82
MONEY SUPPLY WITH TIME DEPOSIT	428.6	478.1	527.2	575.8	639.5	709.8	777.3	858.7	927.4	1005.2	1084.8	10.35	8.67	9.51
TREASURY BILL RATE, 91-DAY	6.44	4.34	4.63	5.13	4.48	4.58	4.76	4.76	4.68	4.68	4.77	.94	.82	1.85
CORPORATE BOND RATE, NEW ISSUE	9.85	7.98	7.93	7.68	7.17	6.97	7.88	7.88	6.91	6.98	6.89	-3.18	-.65	-1.58
INDEX OF INDUS PROD, TOTAL	106.5	106.7	114.7	122.4	127.9	130.4	138.1	145.4	152.8	160.3	168.1	5.15	5.04	5.10
INDEX OF INDUS PROD, MFG.	105.1	104.9	113.4	121.4	127.1	129.6	136.8	144.1	151.4	159.8	166.7	5.33	5.06	5.27
INDEX OF INDUS PROD, STEEL	106.8	96.2	101.3	114.1	113.6	110.5	115.8	125.6	141.5	150.8	160.3	3.52	8.65	5.83
INDEX OF CAPACITY UTILIZATION	82.7	81.8	86.2	89.4	90.4	89.8	89.8	90.8	91.7	92.3	92.7	2.16	.81	1.41
NEW PASSENGER CAR SALES,SAAR	8.44	10.33	11.25	11.67	11.66	11.64	12.39	12.98	13.38	13.79	14.13	3.84	3.34	3.54
TOTAL PRIVATE HOUSING STARTS	1.46	2.08	2.06	1.84	1.58	1.56	1.75	2.03	2.27	2.37	2.45	-6.83	8.72	2.28
GNP IN 1958 DOLLARS	728.8	742.8	789.5	835.8	870.1	893.9	933.5	978.1	1025.2	1073.1	1122.4	4.77	4.72	4.78
IMPLICIT GNP DEFLATOR	135.3	141.6	146.1	152.5	159.1	166.5	172.8	178.5	183.8	188.9	193.8	4.14	2.98	3.56
CONSUMER PRICE INDEX	116.3	121.2	125.1	131.8	137.7	144.5	149.8	154.7	159.4	163.9	168.3	4.51	2.95	3.71
WHSL PRICE INDEX (INDUS COMM)	110.8	114.8	116.5	119.1	122.4	126.8	129.8	131.6	133.8	134.8	134.8	2.69	.95	1.87
PCT CHANGE IN GNP$ (ANN RATE)	6.78	7.83	9.86	10.43	8.63	7.53	8.41	9.19	7.92	7.61	7.29	-.96	-3.58	-.79
PCT CHANGE IN GNP58 (ANN RATE)	3.84	3.85	6.39	5.86	4.11	2.73	4.43	4.78	4.81	4.68	4.59	-2.73	.89	4.62
PCT CHANGE IN GNP DEFLATOR	2.94	4.62	3.24	4.32	4.35	4.66	3.81	3.25	2.97	2.88	2.58	.23	-9.22	-6.25
PCT CHANGE IN CONS PRICE INDEX	4.38	4.19	3.27	4.67	5.15	4.94	3.62	3.28	3.05	2.83	2.64	4.29	-7.63	-5.88
DISPOSABLE PERSONAL INCOME	687.7	743.3	805.6	882.2	959.6	1028.4	1108.3	1186.2	1268.9	1352.4	1439.4	8.45	6.75	7.61
CORP PROFITS WITHOUT IVA ADJ.	75.3	81.7	97.6	111.4	127.8	139.1	151.2	161.3	174.5	188.9	204.2	14.22	7.81	10.78
UNEMPLOYMENT RATE	5.8	5.9	5.3	5.8	4.9	5.1	4.7	4.7	4.7	4.7	4.7	-3.91	-.84	-2.59
PERSONAL SAVINGS RATE	7.8	8.8	7.9	7.8	7.4	6.9	6.9	6.7	6.5	6.4	6.4	-3.58	-1.85	-2.68
FEDERAL GOVT SURPLUS OR DEF	-13.7	-21.4	-18.1	-19.8	-14.8	-4.5	-2.9	7.8	6.3	6.6	5.7	******	******	******

THIS FORECAST WAS PREPARED BY CHASE ECONOMETRICS, INC. ON DEC 1971 AND IS THE FORECAST IN A SET OF FORECASTS
THE PRINCIPLE ASSUMPTIONS FOR THIS RUN ARE FULL EMPLOYMENT AND LESS PRICES

VARIABLE NAME	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	ANNUALIZED COMPOUND GROWTH RATES,YEARS- 1-5	6-10	1-10
TABLE 2.1 -- GROSS NATIONAL PRODUCT IN CONSTANT DOLLARS														
GROSS NATIONAL PRODUCT	720.0	742.0	789.5	835.0	870.1	893.9	933.5	970.1	1025.2	1073.1	1122.4	4.77	4.72	4.70
CONSUMPTION EXPENDITURES	496.5	493.9	521.9	552.1	580.5	601.0	629.0	657.7	686.7	714.7	743.2	5.06	4.23	4.64
DURABLE GOODS	92.0	89.5	94.9	100.6	106.1	110.4	119.1	125.7	132.2	138.2	143.9	5.38	4.85	5.61
NONDURABLE GOODS	207.3	213.5	226.6	239.3	250.6	258.2	269.2	280.1	291.3	302.3	313.0	4.87	3.91	4.37
SERVICES	191.3	190.9	200.3	212.2	223.0	233.2	241.5	251.0	263.3	274.2	285.4	5.12	4.27	4.56
GROSS PRIVATE INVESTMENT	109.0	109.0	122.9	133.9	137.4	136.3	141.6	150.9	159.6	167.7	175.7	5.75	5.55	5.65
FIXED INVESTMENT	100.0	106.1	115.1	122.3	127.5	130.3	134.4	141.0	149.2	157.3	165.1	5.27	5.27	5.03
NONRESIDENTIAL	79.2	78.6	86.3	96.0	100.1	109.7	112.1	115.6	120.0	127.0	134.2	8.60	4.59	6.11
STRUCTURES	24.2	23.0	23.7	26.7	28.7	29.0	31.6	33.2	35.0	37.3	39.5	6.72	5.75	6.10
EQUIPMENT	54.4	55.6	62.7	69.3	77.4	79.9	80.6	82.4	85.9	90.0	94.7	9.46	4.13	6.09
RESIDENTIAL STRUCTURES	22.2	27.4	28.0	26.3	21.5	20.6	22.3	25.5	28.3	29.7	30.9	-6.90	8.51	1.32
NONFARM	20.0	27.0	28.4	25.9	21.1	20.2	21.9	25.1	27.9	29.3	30.5	-7.09	8.65	1.34
FARM	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.00	.00	.00
CHANGE IN INVENTORIES	1.3	2.9	7.9	11.7	9.9	6.1	7.2	9.9	10.4	10.4	10.6	20.19	10.27	15.49
NONFARM	2.0	2.2	7.7	11.7	9.9	6.1	7.2	9.9	10.4	10.4	10.6	20.22	10.27	10.86
FARM	.7	.7	.1	.0	.0	.0	.0	.0	.0	.0	.0	******	******	******
NET EXPORTS OF GOODS AND SERV	2.4	1.4	4.5	3.7	1.1	-.3	-.2	-.3	-.3	.3	1.2	******	******	-2.31
EXPORTS	52.2	54.0	55.2	58.0	60.1	62.4	65.2	68.7	72.6	77.1	81.0	3.49	5.81	4.71
IMPORTS	49.0	52.6	50.7	54.2	59.0	62.7	65.5	69.0	72.9	76.0	80.6	4.58	5.35	4.86
GOVERNMENT PURCHASES	139.5	138.2	140.1	146.0	151.1	156.2	162.4	169.9	179.2	190.6	202.2	3.11	5.64	4.32
FEDERAL	65.4	61.2	58.9	60.0	60.5	61.0	62.6	64.0	66.5	69.6	73.0	-.87	3.92	1.98
NATIONAL DEFENSE	50.7	45.5	43.6	43.6	43.0	42.7	43.4	43.9	44.9	46.2	47.5	-1.56	2.27	.47
OTHER	14.7	15.7	15.3	16.4	17.4	18.3	19.3	20.1	21.5	23.5	25.6	3.90	7.37	5.56
STATE AND LOCAL	77.0	77.0	81.2	86.0	90.6	95.1	99.0	105.0	112.7	120.9	129.2	5.44	6.67	5.92
TABLE 2.2 -- IMPLICIT PRICE DEFLATORS FOR GNP														
GROSS NATIONAL PRODUCT	135.3	141.6	146.1	152.5	159.1	166.5	172.0	178.5	183.0	188.9	193.0	4.14	2.90	3.55
CONSUMPTION EXPENDITURES	129.4	134.6	138.2	143.2	149.0	154.7	159.3	163.7	167.9	172.0	175.9	3.55	2.51	3.02
DURABLE GOODS	108.9	113.1	114.3	116.8	120.2	123.7	126.1	128.1	130.1	131.9	133.5	2.20	1.43	1.86
NONDURABLE GOODS	127.7	131.5	134.3	138.1	141.9	145.3	147.7	150.0	151.9	153.7	155.4	2.53	1.20	1.80
SERVICES	140.2	148.2	154.0	161.6	170.5	179.9	188.6	196.6	204.5	212.3	219.9	4.96	3.91	4.40
FIXED INVESTMENT	132.7	140.5	147.1	155.4	163.5	175.2	186.9	196.0	204.1	211.2	217.0	5.67	3.80	4.90
NONRESIDENTIAL	130.0	136.0	142.5	150.4	159.2	171.3	183.1	191.6	199.0	205.7	211.0	5.79	3.71	4.97
STRUCTURES	152.1	167.5	181.6	195.2	211.3	230.0	249.6	265.2	280.3	295.1	309.6	8.34	5.54	7.06
EQUIPMENT	120.1	124.1	127.7	133.2	139.9	149.1	157.0	161.9	165.9	168.7	171.0	4.69	2.15	3.42
RESIDENTIAL	142.4	151.2	161.0	173.6	184.9	195.9	206.3	216.2	225.7	235.0	243.9	6.60	4.27	5.45
NONFARM	142.4	151.3	161.1	173.0	185.2	196.2	206.7	216.5	226.1	235.3	244.2	6.71	4.25	5.46
FARM	138.6	145.2	155.0	163.0	171.0	179.0	185.5	195.0	203.0	211.0	219.0	5.36	4.24	4.66
CHANGE IN INVENTORIES	120.0	105.4	130.4	134.0	138.5	144.6	148.7	151.2	153.2	154.6	155.6	0.23	1.14	4.42
EXPORTS	125.2	125.6	130.4	134.6	138.9	143.9	148.0	151.0	155.7	160.6	165.5	3.45	2.83	3.11
IMPORTS	110.6	127.1	134.9	139.7	142.0	146.0	149.1	152.6	156.0	159.6	163.2	3.53	2.20	2.82
GOVERNMENT PURCHASES	157.4	168.3	170.7	180.7	187.2	206.2	215.1	223.1	229.4	235.6	241.2	5.21	2.90	4.07
FEDERAL	140.7	150.2	170.1	182.0	189.5	195.0	200.7	206.1	209.0	212.5	215.1	5.47	1.74	3.66
STATE AND LOCAL	165.0	176.3	184.9	193.3	202.3	212.9	224.1	233.3	241.3	248.0	255.9	4.02	3.30	4.22

THIS FORECAST WAS PREPARED BY CHASE ECONOMETRICS, INC. ON DEC 1971 AND IS THE FORECAST IN A SET OF FORECASTS
THE PRINCIPLE ASSUMPTIONS FOR THIS RUN ARE FULL EMPLOYMENT AND PRICES AND GOVERNMENT OFFSET 150 PERCENT

TABLE 1.1 -- GROSS NATIONAL PRODUCT IN CURRENT DOLLARS

VARIABLE NAME	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	ANNUALIZED COMPOUND GROWTH RATES,YEARS- 1-5	6-10	1-10
GROSS NATIONAL PRODUCT	974.1	1050.4	1153.9	1274.3	1391.0	1517.2	1659.4	1884.3	1953.8	2110.0	2276.5	9.63	8.23	8.97
CONSUMPTION EXPENDITURES	615.9	664.9	721.4	798.9	866.4	942.2	1030.2	1117.2	1205.7	1294.8	1387.4	9.10	7.73	8.51
DURABLE GOODS	104.7	101.3	108.5	117.4	120.0	130.5	153.4	165.4	177.5	189.4	200.9	8.15	6.97	7.90
NONDURABLE GOODS	264.7	280.6	304.4	330.4	356.3	379.7	407.9	433.5	458.4	483.7	509.9	7.85	5.74	6.85
SERVICES	262.5	283.0	308.5	343.0	382.2	423.9	468.9	518.2	569.0	621.0	676.6	10.63	9.60	10.16
GROSS PRIVATE INVESTMENT	136.6	152.3	179.6	205.7	222.6	241.3	268.2	296.9	323.0	351.4	380.6	12.20	9.14	10.70
FIXED INVESTMENT	133.0	149.1	169.3	190.0	200.9	230.7	254.4	280.1	300.2	330.0	360.3	11.53	9.39	10.42
NONRESIDENTIAL	109.3	107.6	123.0	144.5	169.3	191.3	210.9	220.4	240.0	272.6	296.3	15.40	8.80	11.90
STRUCTURES	36.0	30.5	43.0	52.2	60.7	69.2	79.4	89.3	100.3	113.3	126.5	15.70	12.34	14.11
EQUIPMENT	65.3	69.1	80.0	92.3	100.6	122.1	131.4	130.1	140.5	159.2	169.0	15.31	6.62	10.50
RESIDENTIAL STRUCTURES	31.7	41.5	46.3	45.6	39.6	39.4	43.5	51.7	59.4	63.4	67.9	-1.20	11.77	5.61
NONFARM	31.1	41.0	45.7	44.9	38.9	38.7	42.0	51.0	50.6	62.6	67.1	-1.30	11.80	5.63
CHANGE IN INVENTORIES	2.0	3.2	10.3	15.6	13.0	10.6	13.0	16.0	15.7	15.4	16.3	35.31	4.27	19.90
NET EXPORTS OF GOODS AND SERV	3.9	1.0	2.6	2.2	-.7	-2.6	-3.2	-4.6	-5.0	-3.5	-1.2	******	******	******
EXPORTS	62.9	67.9	72.1	78.0	83.6	80.9	96.5	104.1	112.6	123.1	134.6	7.27	8.66	7.90
IMPORTS	59.0	66.0	69.5	75.0	84.3	92.4	99.0	100.7	117.5	126.6	135.9	0.45	0.02	0.19
GOVERNMENT PURCHASES	219.4	232.6	250.3	275.4	302.5	330.3	364.4	396.0	429.2	467.3	509.9	9.66	8.76	9.10
FEDERAL	97.2	96.0	100.1	109.2	114.6	119.5	125.7	132.9	142.1	151.4	161.2	5.39	6.41	5.02
NATIONAL DEFENSE	75.3	72.0	74.0	79.4	01.5	03.6	07.1	00.5	94.3	90.1	102.1	3.02	4.05	3.95
OTHER	21.9	24.0	26.0	29.0	33.0	35.0	30.6	42.3	47.0	53.3	59.1	9.59	11.21	10.10
STATE AND LOCAL	122.2	135.7	150.2	166.2	187.9	210.0	230.6	261.9	287.1	315.9	340.7	12.42	9.94	11.04

TABLE 1.2 -- OTHER MAJOR ECONOMIC INDICATORS

MONEY SUPPLY WITHOUT TIME DEP	212.5	224.4	239.5	257.3	279.2	307.4	337.6	369.7	404.0	437.3	469.9	0.19	0.62	0.55
MONEY SUPPLY WITH TIME DEPOSIT	420.6	470.1	527.2	575.0	639.7	710.0	700.7	059.6	944.5	1030.5	1117.0	10.42	9.39	9.09
TREASURY BILL RATE, 91-DAY	6.44	4.34	4.63	5.13	4.49	4.61	5.10	5.09	5.02	5.16	5.34	1.53	1.20	2.34
CORPORATE BOND RATE, NEW ISSUE	9.05	7.90	7.93	7.60	7.17	7.01	7.24	7.22	7.25	7.37	7.40	-2.95	.02	-.61
INDEX OF INDUS PROD, TOTAL	106.5	106.7	114.7	122.4	120.2	132.3	141.0	147.9	154.1	161.1	160.3	5.52	4.53	5.19
INDEX OF INDUS PROD, MFG.	105.1	104.9	113.4	121.4	127.4	131.3	139.0	146.6	152.0	159.7	166.9	5.77	4.53	5.29
INDEX OF INDUS PROD, STEEL	106.0	96.2	101.3	114.1	113.0	112.5	117.7	125.1	135.0	139.4	146.6	3.99	5.65	4.79
INDEX OF CAPACITY UTILIZATION	02.7	01.0	06.2	09.4	00.7	00.3	01.3	02.0	02.3	02.0	03.2	2.51	.49	1.46
NEW PASSENGER CAR SALES,SAAR	0.44	10.33	11.25	11.67	11.71	11.01	12.50	12.97	13.45	13.07	14.20	3.42	3.23	3.59
TOTAL PRIVATE HOUSING STARTS	1.46	2.00	2.06	1.04	1.49	1.49	1.60	1.04	2.02	2.05	2.09	-7.00	7.03	.50
GNP IN 1958 DOLLARS	720.0	742.0	709.5	035.0	073.0	009.0	054.9	090.9	1041.6	1005.2	1131.6	5.21	4.34	4.00
IMPLICIT GNP DEFLATOR	135.3	141.6	146.1	152.5	159.2	100.9	173.7	100.0	107.6	194.4	201.1	4.20	3.73	3.90
CONSUMER PRICE INDEX	116.3	121.2	125.1	131.0	137.7	144.7	150.9	157.4	164.1	170.6	177.1	4.54	4.09	4.30
WHSL PRICE INDEX (INDUS COMM)	110.0	114.0	110.5	119.1	122.4	120.9	130.1	132.4	134.5	136.2	137.7	2.70	1.44	2.12
PCT CHANGE IN GNP$ (ANN RATE)	6.70	7.03	9.06	10.43	9.16	9.07	9.37	0.73	0.29	7.99	7.09	3.75	-4.21	.09
PCT CHANGE IN GNP58 (ANN RATE)	3.04	3.05	6.39	5.06	4.55	4.03	5.04	4.61	4.20	4.19	4.20	7.21	-4.03	3.01
PCT CHANGE IN GNP DEFLATOR	2.94	4.62	3.24	4.32	4.41	4.04	4.12	3.95	3.05	3.65	3.47	1.14	-4.21	-3.14
PCT CHANGE IN CONS PRICE INDEX	4.30	4.19	3.27	4.67	5.15	5.05	4.22	4.32	4.24	3.99	3.79	5.01	-2.66	-1.10
DISPOSABLE PERSONAL INCOME	007.7	743.3	005.6	002.2	963.3	1044.9	1142.7	1231.4	1325.0	1421.1	1521.2	0.09	7.42	0.27
CORP PROFITS WITHOUT IVA ADJ.	75.3	01.7	97.6	111.0	120.5	142.9	157.5	100.7	103.1	199.5	217.1	15.00	0.36	11.46
UNEMPLOYMENT RATE	5.0	5.9	5.3	5.0	4.0	4.0	4.4	4.4	4.4	4.4	4.4	-5.14	.14	-3.26
PERSONAL SAVINGS RATE	7.0	0.0	7.9	7.0	7.6	7.3	7.4	6.0	6.4	6.3	6.2	-2.11	-4.30	-2.05
FEDERAL GOVT SURPLUS OR DEF	-13.7	-21.4	-10.1	-19.0	-16.5	-10.9	-16.4	-5.3	-6.0	-4.7	-3.7	******	******	******

THIS FORECAST WAS PREPARED BY CHASE ECONOMETRICS, INC. ON DEC 1971 AND IS THE FORECAST IN A SET OF FORECASTS
THE PRINCIPLE ASSUMPTIONS FOR THIS RUN ARE FULL EMPLOYMENT AND PRICES AND GOVERNMENT OFFSET 150 PERCENT

TABLE 2.1 -- GROSS NATIONAL PRODUCT IN CONSTANT DOLLARS

VARIABLE NAME	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	ANNUALIZED COMPOUND GROWTH RATES, YEARS- 1-5	6-10	1-10
GROSS NATIONAL PRODUCT	720.0	742.0	789.5	835.0	873.0	909.0	954.9	998.9	1041.6	1085.2	1131.6	5.21	4.34	4.80
CONSUMPTION EXPENDITURES	496.5	493.9	521.9	552.1	581.6	608.1	642.0	673.2	701.0	729.1	756.5	5.34	4.16	4.85
DURABLE GOODS	92.0	89.5	96.9	100.6	106.5	111.0	121.1	127.8	134.2	140.4	146.2	5.71	4.03	5.68
NONDURABLE GOODS	287.3	283.5	226.6	239.3	251.1	261.1	275.0	286.5	297.2	308.2	319.6	5.16	3.83	4.50
SERVICES	191.3	198.9	208.3	212.2	224.0	235.2	246.7	259.0	270.4	280.5	290.7	5.35	4.19	4.78
GROSS PRIVATE INVESTMENT	109.0	109.0	122.9	133.9	137.7	139.1	145.1	152.0	158.5	164.6	171.5	6.28	4.27	5.16
FIXED INVESTMENT	108.0	106.1	115.1	122.3	127.7	131.7	135.9	141.0	148.4	154.0	161.3	5.57	4.30	4.76
NONRESIDENTIAL	79.2	78.6	86.3	96.0	106.3	111.7	115.0	118.4	122.9	129.0	135.0	9.17	4.07	6.10
STRUCTURES	24.2	23.0	23.7	26.7	28.7	29.9	31.7	33.3	35.1	37.3	39.4	6.90	5.59	6.14
EQUIPMENT	54.4	55.6	62.7	69.3	77.6	81.0	83.4	85.1	87.9	91.7	95.6	10.11	3.40	6.19
RESIDENTIAL STRUCTURES	28.0	27.0	28.0	26.3	21.4	20.0	20.0	23.4	25.5	25.0	26.3	-7.55	6.04	-.45
NONFARM	27.6	27.0	27.4	25.9	21.0	19.6	20.4	23.0	25.1	25.4	25.9	-7.60	6.15	-.46
FARM	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.00	.00	.00
CHANGE IN INVENTORIES	1.3	2.9	7.9	11.7	9.9	7.3	9.2	11.0	10.1	9.0	10.2	25.95	2.53	14.97
NONFARM	2.0	2.2	7.7	11.7	9.9	7.3	9.2	11.0	10.1	9.0	10.2	34.36	2.53	18.32
FARM	.7	.7	.1	.0	.0	.0	.0	.0	.0	.0	.0	******	******	******
NET EXPORTS OF GOODS AND SERV	2.4	1.4	4.5	3.7	1.1	-.9	-1.0	-3.1	-3.9	-4.0	-3.9	******	******	******
EXPORTS	52.2	54.0	55.2	58.0	60.1	62.4	65.0	68.0	71.3	75.2	79.3	3.60	5.00	4.35
IMPORTS	49.0	52.6	50.7	54.2	59.0	63.3	66.9	71.2	75.3	79.2	83.1	4.75	5.59	5.22
GOVERNMENT PURCHASES	139.5	138.2	140.1	146.0	153.3	162.0	168.9	176.0	185.2	195.7	207.5	4.10	5.29	4.62
FEDERAL	65.4	61.2	58.9	60.0	60.5	61.0	62.6	64.3	67.4	70.0	74.1	-.80	4.30	2.14
NATIONAL DEFENSE	50.7	45.5	43.6	43.0	43.0	42.7	43.3	43.0	44.7	45.0	46.9	-1.57	1.99	.34
OTHER	14.7	15.7	15.3	16.4	17.4	18.3	19.2	20.5	22.7	24.9	27.2	3.90	9.01	6.27
STATE AND LOCAL	77.0	77.0	81.2	86.0	92.0	101.0	106.3	111.7	117.0	125.0	133.4	7.23	5.85	6.30

TABLE 2.2 -- IMPLICIT PRICE DEFLATORS FOR GNP

GROSS NATIONAL PRODUCT	135.3	141.6	146.1	152.5	159.2	166.9	173.7	180.6	187.6	194.4	201.1	4.20	3.73	3.90
CONSUMPTION EXPENDITURES	129.4	134.6	138.2	143.2	149.0	154.9	160.2	165.9	171.0	177.6	183.4	3.50	3.43	3.49
DURABLE GOODS	108.9	113.1	114.3	116.0	120.2	123.9	126.7	129.4	132.2	134.9	137.4	2.31	2.04	2.10
NONDURABLE GOODS	127.7	131.5	134.3	138.1	141.9	145.4	148.3	151.3	154.2	156.9	159.5	2.56	1.04	2.17
SERVICES	148.2	148.2	154.0	161.6	170.6	180.2	190.0	200.1	210.7	221.6	232.7	5.01	5.20	5.14
FIXED INVESTMENT	132.7	140.5	147.1	155.4	163.5	175.1	187.2	197.6	207.7	217.0	225.0	5.45	4.00	5.40
NONRESIDENTIAL	130.0	136.0	142.5	150.4	159.2	171.2	183.2	192.9	202.3	211.3	219.5	5.77	4.62	5.39
STRUCTURES	152.1	167.5	181.6	195.2	211.4	231.1	250.0	260.2	285.9	303.0	321.3	0.30	6.39	7.50
EQUIPMENT	120.1	124.1	127.7	133.2	139.9	149.3	157.6	163.5	169.0	173.6	177.6	4.72	3.04	4.06
RESIDENTIAL	142.4	151.2	161.0	173.6	185.1	196.7	200.0	221.0	233.3	245.6	257.0	6.00	5.42	6.10
NONFARM	142.4	151.3	161.1	173.0	185.3	197.1	209.2	221.4	233.0	246.2	250.4	6.03	5.42	6.12
FARM	130.0	145.2	155.0	163.0	171.0	179.0	185.5	195.0	203.0	211.0	219.0	5.36	4.24	4.66
CHANGE IN INVENTORIES	120.0	105.4	130.4	134.0	130.5	144.7	149.1	152.3	155.2	157.6	159.6	0.25	1.72	4.72
EXPORTS	125.2	125.6	130.4	134.6	130.9	143.9	140.4	153.0	157.0	163.7	169.0	3.44	3.41	3.40
IMPORTS	110.0	127.1	136.9	139.7	142.7	146.0	149.2	152.7	156.2	159.7	163.4	3.52	2.30	2.03
GOVERNMENT PURCHASES	157.4	160.3	170.7	100.7	197.3	206.6	215.7	224.3	231.7	230.0	245.7	5.25	3.30	4.20
FEDERAL	140.7	150.2	170.1	102.0	109.5	195.0	200.9	206.6	210.9	214.3	217.6	5.47	2.02	3.60
STATE AND LOCAL	165.0	176.3	104.9	193.3	202.3	213.0	224.5	234.4	243.7	252.6	261.3	4.03	3.07	4.46

THIS FORECAST WAS PREPARED BY CHASE ECONOMETRICS, INC. ON JAN 1972 AND IS THE FORECAST IN A SET OF FORECASTS
THE PRINCIPLE ASSUMPTIONS FOR THIS RUN ARE RECESSION RUN WITHOUT PRICES

VARIABLE NAME	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	ANNUALIZED COMPOUND GROWTH RATES,YEARS- 1-5	6-10	1-10
TABLE 1.1 -- GROSS NATIONAL PRODUCT IN CURRENT DOLLARS														
GROSS NATIONAL PRODUCT	974.1	1050.4	1146.8	1243.5	1325.2	1423.3	1543.8	1673.5	1806.2	1944.7	2085.7	7.89	7.81	7.91
CONSUMPTION EXPENDITURES	615.9	664.9	718.7	777.7	827.1	878.8	941.7	1012.3	1088.4	1165.8	1241.9	7.28	7.16	7.18
DURABLE GOODS	104.7	101.3	108.1	114.3	110.3	126.5	138.9	149.4	159.5	169.5	179.8	5.72	6.55	4.53
NONDURABLE GOODS	264.7	288.6	303.3	325.5	342.3	358.5	378.3	399.8	422.5	444.8	467.1	6.31	5.41	5.82
SERVICES	262.5	283.8	307.4	338.8	365.6	393.8	424.4	463.8	506.4	550.7	595.8	8.55	8.85	8.61
GROSS PRIVATE INVESTMENT	136.6	152.3	174.3	188.6	195.9	217.1	246.1	276.8	301.3	324.9	348.3	9.27	9.87	9.62
FIXED INVESTMENT	133.8	149.1	164.8	180.2	190.9	208.9	232.9	260.8	284.9	309.2	333.3	8.79	9.38	9.34
NONRESIDENTIAL	109.3	107.6	119.8	135.1	147.6	163.1	179.8	197.4	217.4	239.8	260.9	10.97	9.88	10.33
STRUCTURES	36.8	38.5	42.7	50.9	57.1	62.9	70.8	78.6	89.2	101.5	113.7	13.87	12.91	12.77
EQUIPMENT	65.3	69.1	76.3	84.2	90.5	100.2	109.8	118.8	128.2	138.3	147.2	9.74	7.79	8.76
RESIDENTIAL STRUCTURES	31.7	41.5	45.8	45.1	43.3	45.8	53.9	62.6	67.5	69.5	72.4	2.66	7.69	6.37
NONFARM	31.1	41.8	45.2	44.4	42.6	45.1	53.1	61.8	66.7	68.6	71.6	2.42	7.73	6.39
CHANGE IN INVENTORIES	2.8	3.2	9.5	8.2	5.8	8.2	13.3	16.8	16.3	15.7	15.8	26.94	3.87	18.88
NET EXPORTS OF GOODS AND SERV	3.9	1.8	3.5	4.5	5.3	6.2	6.7	5.5	4.9	5.8	7.7	56.48	3.78	24.97
EXPORTS	62.9	67.9	72.1	78.8	83.6	98.1	97.1	104.9	113.5	124.8	135.1	7.34	8.68	7.94
IMPORTS	59.8	66.8	68.6	73.5	78.2	83.9	90.5	99.4	108.6	118.2	127.4	5.85	8.94	7.43
GOVERNMENT PURCHASES	219.6	232.6	250.3	272.9	296.7	322.1	349.4	378.9	411.5	448.9	487.8	8.48	8.78	8.57
FEDERAL	97.2	96.8	100.1	106.7	113.3	119.5	125.7	132.8	139.4	148.8	157.1	5.39	5.73	5.52
NATIONAL DEFENSE	75.1	72.8	74.8	76.9	80.3	83.6	87.1	90.5	94.3	98.1	102.1	3.82	4.85	3.95
OTHER	21.9	24.8	26.8	29.8	33.8	35.8	38.6	41.4	45.1	49.9	55.8	9.59	9.23	9.22
STATE AND LOCAL	122.2	135.7	150.2	166.2	183.4	202.6	223.6	246.9	272.1	300.9	330.7	10.53	10.27	10.39
TABLE 1.2 -- OTHER MAJOR ECONOMIC INDICATORS														
MONEY SUPPLY WITHOUT TIME DEP	212.5	224.4	239.4	256.5	274.8	299.1	325.2	352.3	378.8	404.1	427.9	7.45	7.18	7.43
MONEY SUPPLY WITH TIME DEPOSIT	428.6	478.1	525.4	569.2	615.4	678.8	732.8	802.5	873.3	945.8	1018.8	8.84	8.59	8.76
TREASURY BILL RATE, 91-DAY	6.44	4.34	4.72	5.38	5.86	4.73	4.32	4.14	4.11	4.24	4.37	2.18	.25	.88
CORPORATE BOND RATE, NEW ISSUE	9.85	7.98	7.98	7.78	7.51	7.23	7.88	6.83	6.59	6.41	6.35	-2.17	-2.69	-2.39
INDEX OF INDUS PROD, TOTAL	106.5	106.7	114.8	118.8	122.6	129.4	140.2	149.2	156.9	164.5	171.6	4.94	5.18	5.42
INDEX OF INDUS PROD, MFG.	105.1	104.9	112.5	116.2	117.9	124.1	135.8	144.1	151.8	159.5	166.6	4.28	5.41	5.27
INDEX OF INDUS PROD, STEEL	106.8	95.9	108.3	112.1	112.2	120.3	138.1	156.8	167.8	172.4	178.8	5.82	6.56	7.11
INDEX OF CAPACITY UTILIZATION	82.7	81.8	85.6	85.9	84.9	86.8	90.7	92.6	92.9	93.8	92.6	1.49	.52	1.39
NEW PASSENGER CAR SALES,SAAR	8.44	10.33	11.19	11.37	11.24	11.68	12.52	13.15	13.58	13.98	14.25	2.94	3.28	3.63
TOTAL PRIVATE HOUSING STARTS	1.44	2.08	2.03	1.86	1.77	1.98	2.28	2.45	2.54	2.52	2.54	-1.31	3.67	2.67
GNP IN 1958 DOLLARS	720.8	742.8	785.9	821.8	848.5	889.9	946.7	1002.5	1051.1	1102.8	1149.8	4.65	4.96	4.97
IMPLICIT GNP DEFLATOR	135.3	141.6	145.9	151.4	156.2	159.9	163.1	166.9	171.5	176.5	181.5	3.18	2.72	2.88
CONSUMER PRICE INDEX	116.3	121.2	124.8	129.8	134.3	137.6	140.2	143.8	148.8	152.6	157.2	3.22	2.91	2.93
WHSL PRICE INDEX (INDUS COMM)	110.8	114.8	116.1	117.7	119.3	120.8	121.6	122.6	123.9	124.9	125.9	1.46	.88	1.11
PCT CHANGE IN GNP$ (ANN RATE)	6.78	7.83	9.18	8.43	6.57	7.48	8.47	8.48	7.93	7.67	7.25	-1.38	-3.81	-.85
PCT CHANGE IN GNP58 (ANN RATE)	3.84	3.15	5.91	4.47	3.35	4.88	6.38	5.98	5.84	4.85	4.27	12.44	-9.59	3.78
PCT CHANGE IN GNP DEFLATOR	2.94	4.62	3.87	3.88	3.12	2.48	1.96	2.37	2.75	2.89	2.86	-15.89	9.93	-5.17
PCT CHANGE IN CONS PRICE INDEX	4.38	4.19	2.97	4.86	3.42	2.45	1.89	2.56	2.96	3.09	3.04	-12.57	12.58	-3.58
DISPOSABLE PERSONAL INCOME	687.7	743.1	802.8	864.8	922.2	979.8	1058.3	1123.9	1204.8	1286.4	1369.2	7.13	6.85	7.82
CORP PROFITS WITHOUT IVA ADJ.	75.1	81.7	95.5	101.1	100.2	118.8	132.4	144.2	155.6	167.5	178.4	9.88	7.75	9.85
UNEMPLOYMENT RATE	5.8	5.9	5.4	5.7	6.2	6.8	5.6	5.5	5.4	5.4	5.4	.43	-.68	-.96
PERSONAL SAVINGS RATE	7.8	8.8	7.9	7.5	7.7	7.7	7.7	7.3	7.8	6.7	6.6	-.93	-3.94	-2.14
FEDERAL GOVT SURPLUS OR DEF	-13.7	-21.4	-19.6	-21.9	-27.7	-28.3	-17.1	-3.2	-2.4	3.1	8.8	******	******	******

THIS FORECAST WAS PREPARED BY CHASE ECONOMETRICS, INC. ON JAN 1972 AND IS THE FORECAST IN A SET OF FORECASTS
THE PRINCIPLE ASSUMPTIONS FOR THIS RUN ARE RECESSION RUN WITHOUT PRICES

VARIABLE NAME	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	ANNUALIZED COMPOUND GROWTH RATES, YEARS- 1-5	6-10	1-10
TABLE 2.1 -- GROSS NATIONAL PRODUCT IN CONSTANT DOLLARS														
GROSS NATIONAL PRODUCT	720.0	742.0	785.9	821.0	840.5	880.9	946.7	1002.5	1053.1	1102.0	1149.0	4.45	4.96	4.97
CONSUMPTION EXPENDITURES	496.5	491.9	521.1	546.4	565.5	588.4	621.0	653.0	686.2	715.9	744.0	4.47	4.62	4.65
DURABLE GOODS	92.0	89.5	94.0	98.7	101.7	106.0	116.2	123.5	129.9	135.9	141.4	4.58	5.03	5.21
NONDURABLE GOODS	207.3	213.5	226.4	237.3	245.5	254.0	267.2	279.0	290.9	302.2	313.2	4.53	4.85	4.75
SERVICES	191.3	198.9	199.9	210.4	218.3	226.0	237.6	251.2	265.4	277.0	289.3	4.48	5.05	4.72
GROSS PRIVATE INVESTMENT	109.0	109.0	119.4	123.6	123.7	133.1	146.9	160.4	169.3	175.2	181.4	5.13	5.42	5.02
FIXED INVESTMENT	100.0	106.1	112.1	117.4	120.0	127.1	137.2	148.4	156.7	164.2	171.0	4.63	5.05	5.44
NONRESIDENTIAL	79.2	78.6	83.6	91.0	95.6	102.2	108.9	116.7	123.9	131.0	138.6	6.76	6.21	6.49
STRUCTURES	24.2	23.0	23.6	26.6	28.4	29.0	31.6	33.8	36.3	39.2	41.6	6.64	7.17	6.91
EQUIPMENT	54.4	55.6	59.9	64.3	67.2	72.4	77.3	82.9	87.6	92.7	96.9	6.81	5.81	6.36
RESIDENTIAL STRUCTURES	22.2	27.4	28.5	26.4	24.4	24.9	28.3	31.6	32.0	32.3	32.4	-2.37	3.42	1.05
NONFARM	20.0	27.0	28.1	26.0	24.0	24.5	27.9	31.2	32.4	31.9	32.0	-2.68	3.46	1.00
FARM	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.00	.00	.00
CHANGE IN INVENTORIES	1.3	2.9	7.3	6.2	3.7	6.0	9.7	12.1	11.6	11.0	10.4	19.98	1.99	15.26
NONFARM	2.0	2.2	7.2	6.2	3.7	6.0	9.7	12.1	11.6	11.0	10.4	27.91	1.99	10.62
FARM	.7	.7	.1	.0	.0	.0	.0	.0	.0	.0	.0	******	******	******
NET EXPORTS OF GOODS AND SERV	2.4	1.4	5.2	5.6	6.1	6.9	7.6	7.1	6.0	6.9	7.5	47.65	-.20	20.85
EXPORTS	52.2	54.0	55.3	58.2	60.0	64.3	68.3	72.3	76.4	80.9	85.5	4.46	5.79	5.23
IMPORTS	49.0	52.6	50.1	52.6	54.0	57.5	60.7	65.2	69.6	74.0	78.0	2.25	6.48	4.47
GOVERNMENT PURCHASES	139.5	138.2	140.2	145.5	153.1	161.6	171.2	181.1	191.0	203.9	216.1	3.99	5.99	5.89
FEDERAL	65.4	61.2	58.9	58.9	60.5	62.4	64.9	66.8	69.5	72.0	76.4	.49	4.17	2.49
NATIONAL DEFENSE	50.7	45.5	43.6	42.4	42.9	43.7	44.9	45.8	47.0	48.3	49.6	-1.01	2.52	.97
OTHER	14.7	15.7	15.3	16.5	17.6	18.7	19.9	21.0	22.5	24.0	26.0	4.49	7.62	6.09
STATE AND LOCAL	77.0	77.0	81.3	86.6	92.6	99.2	106.4	114.3	122.3	131.1	139.0	6.56	7.06	6.85
TABLE 2.2 -- IMPLICIT PRICE DEFLATORS FOR GNP														
GROSS NATIONAL PRODUCT	135.3	141.6	145.9	151.4	156.2	159.9	163.1	166.9	171.5	176.5	181.5	3.10	2.72	2.88
CONSUMPTION EXPENDITURES	129.4	134.6	137.9	142.3	146.3	149.2	151.6	154.8	158.6	162.7	166.9	2.61	2.63	2.62
DURABLE GOODS	108.9	113.1	114.0	115.7	117.3	118.5	119.5	121.0	122.0	124.7	126.6	1.19	1.45	1.26
NONDURABLE GOODS	127.7	131.5	134.0	137.2	139.4	140.7	141.6	143.3	145.2	147.2	149.1	1.71	1.31	1.41
SERVICES	140.2	148.2	153.7	160.6	167.4	173.2	178.6	184.3	190.0	198.2	205.9	3.98	3.62	3.72
FIXED INVESTMENT	132.7	140.5	147.0	153.5	159.0	164.3	169.7	175.2	181.0	188.3	195.0	3.98	3.54	3.76
NONRESIDENTIAL	130.0	136.8	142.4	148.5	154.3	159.6	164.3	169.1	175.4	181.8	188.3	3.93	3.46	3.61
STRUCTURES	152.1	167.5	180.7	191.0	201.0	211.5	221.6	232.4	245.3	259.0	273.0	6.00	5.35	5.57
EQUIPMENT	120.1	124.1	127.3	130.9	134.6	138.3	140.9	143.3	146.4	149.2	151.0	2.74	1.80	2.26
RESIDENTIAL	142.4	151.2	160.5	170.7	177.5	183.5	190.1	197.6	206.1	214.9	223.6	4.94	4.14	4.44
NONFARM	142.4	151.3	160.6	170.9	177.7	183.6	190.2	197.7	206.1	214.9	223.7	4.95	4.14	4.43
FARM	130.6	145.2	155.3	163.0	171.0	179.0	185.5	195.0	203.0	211.0	219.0	5.34	4.24	4.66
CHANGE IN INVENTORIES	120.0	105.4	109.9	112.1	114.3	116.4	117.4	118.9	120.5	122.0	123.4	6.66	1.07	3.68
EXPORTS	125.2	125.6	130.3	134.0	137.3	140.0	142.3	145.1	148.6	153.2	158.0	2.75	2.66	2.58
IMPORTS	110.6	127.1	130.9	139.0	142.0	145.9	149.1	152.5	156.0	159.6	163.3	3.51	2.31	2.92
GOVERNMENT PURCHASES	157.4	168.3	178.5	187.5	193.0	199.3	204.0	209.2	214.6	220.1	225.7	4.31	2.55	3.31
FEDERAL	148.7	158.2	169.9	181.2	187.4	191.5	193.0	197.6	200.6	203.1	205.7	4.00	1.50	2.95
STATE AND LOCAL	165.0	176.3	184.7	191.0	198.0	204.2	210.2	215.9	222.5	229.5	236.6	3.74	3.80	3.72

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THIS FORECAST WAS PREPARED BY CHASE ECONOMETRICS, INC. ON JAN 1971 AND IS THE FORECAST IN A SET OF FORECASTS

THE PRINCIPLE ASSUMPTIONS FOR THIS RUN ARE RECESSION WITH 100 PERCENT PRICES

VARIABLE NAME	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	ANNUALIZED COMPOUND GROWTH RATES,YEARS- 1-5	6-10	1-10
TABLE 1.1 -- GROSS NATIONAL PRODUCT IN CURRENT DOLLARS														
GROSS NATIONAL PRODUCT	974.1	1050.4	1152.9	1267.3	1334.3	1429.5	1549.6	1679.6	1811.5	1946.4	2083.4	8.81	7.78	7.98
CONSUMPTION EXPENDITURES	615.9	664.9	728.4	779.8	829.7	888.8	943.4	1012.8	1085.7	1158.6	1231.6	7.28	6.89	7.08
DURABLE GOODS	104.7	101.3	108.3	113.9	119.8	127.8	140.6	152.8	162.4	172.1	181.4	5.82	6.57	6.69
NONDURABLE GOODS	264.7	288.6	304.8	326.4	343.2	359.2	378.8	399.7	421.6	442.8	464.2	6.37	5.21	5.74
SERVICES	242.5	283.8	308.1	339.5	367.5	394.6	424.8	460.2	501.7	543.6	586.8	8.66	8.42	8.41
GROSS PRIVATE INVESTMENT	136.6	152.3	177.2	198.9	208.3	222.5	251.1	283.3	318.1	333.8	356.7	9.99	9.18	9.91
FIXED INVESTMENT	133.8	149.1	167.2	182.9	196.1	216.2	239.1	266.3	292.7	317.5	341.3	9.74	9.38	9.63
NONRESIDENTIAL	109.3	107.6	121.7	138.8	154.5	172.8	186.9	203.4	223.3	245.8	267.6	12.57	9.39	10.64
STRUCTURES	36.8	38.5	42.9	51.3	58.8	64.5	71.7	79.9	90.3	102.8	115.4	13.77	12.65	12.94
EQUIPMENT	65.3	69.1	78.8	87.5	96.6	108.2	115.2	123.5	133.8	143.8	152.2	11.89	7.28	9.16
RESIDENTIAL STRUCTURES	31.7	41.5	45.6	44.1	41.6	43.5	52.2	62.9	69.5	71.7	73.7	1.15	8.98	6.57
NONFARM	31.1	41.8	44.9	43.5	40.9	42.8	51.5	62.1	68.7	70.8	72.8	1.89	9.84	6.59
CHANGE IN INVENTORIES	2.8	3.2	10.8	8.8	4.2	6.6	11.9	17.8	17.3	16.3	15.5	28.44	6.65	19.29
NET EXPORTS OF GOODS AND SERV	3.9	1.8	2.9	3.7	3.6	3.8	4.8	4.4	4.1	5.1	7.2	38.83	18.47	24.85
EXPORTS	62.9	67.9	72.1	78.8	83.5	98.1	97.1	105.8	113.7	124.1	135.3	7.33	8.63	7.96
IMPORTS	59.8	66.8	69.2	74.3	79.9	86.3	92.3	100.6	109.6	119.8	128.1	6.68	8.54	7.49
GOVERNMENT PURCHASES	219.4	232.6	258.3	272.9	296.7	322.1	349.4	378.9	411.5	448.9	487.8	8.48	8.78	8.57
FEDERAL	97.2	96.8	108.1	106.7	113.3	119.5	125.7	132.8	139.4	148.8	157.1	5.39	5.73	5.52
NATIONAL DEFENSE	75.3	72.8	74.8	76.9	80.3	83.6	87.1	90.5	94.3	98.1	102.1	3.82	4.85	3.95
OTHER	21.9	24.8	26.8	29.8	33.8	35.8	38.6	41.4	45.1	49.9	55.8	9.59	9.23	9.22
STATE AND LOCAL	122.2	135.7	150.2	166.2	183.4	202.6	223.6	246.9	272.1	300.9	330.7	10.53	10.27	10.39
TABLE 1.2 -- OTHER MAJOR ECONOMIC INDICATORS														
MONEY SUPPLY WITHOUT TIME DEP	212.5	224.4	239.5	256.2	274.3	297.4	322.2	348.8	373.7	398.2	421.1	7.38	6.92	7.24
MONEY SUPPLY WITH TIME DEPOSIT	428.6	478.1	526.5	571.3	619.6	677.1	739.4	810.8	882.1	956.1	1030.4	9.89	8.65	8.98
TREASURY BILL RATE, 91-DAY	6.44	4.34	4.66	5.31	5.88	4.69	4.33	4.85	3.98	3.97	4.85	1.99	-1.64	-.76
CORPORATE BOND RATE, NEW ISSUE	9.85	7.98	7.95	7.77	7.47	7.21	7.89	6.88	6.48	6.22	6.87	-2.26	-3.81	-2.88
INDEX OF INDUS PROD, TOTAL	106.5	106.7	114.5	118.6	121.4	127.3	137.5	146.8	154.9	162.4	169.7	4.51	5.41	5.29
INDEX OF INDUS PROD, MFG.	105.1	104.9	113.1	116.1	116.8	121.9	132.8	141.4	149.5	157.2	164.5	3.82	5.66	5.12
INDEX OF INDUS PROD, STEEL	106.8	95.9	99.9	118.1	106.8	111.3	128.2	149.5	162.7	169.6	175.4	3.78	8.16	6.93
INDEX OF CAPACITY UTILIZATION	82.7	81.8	86.8	85.6	83.9	85.4	88.5	91.8	91.9	92.8	91.9	1.89	.92	1.38
NEW PASSENGER CAR SALES,SAAR	8.44	10.33	11.22	11.14	10.44	10.58	11.58	12.42	12.97	13.39	13.71	.41	4.32	3.19
TOTAL PRIVATE HOUSING STARTS	1.46	2.38	2.81	1.88	1.67	1.78	2.12	2.45	2.68	2.59	2.58	-2.98	5.84	2.86
GNP IN 1958 DOLLARS	728.8	742.8	787.9	828.8	844.2	888.6	933.2	989.8	1042.6	1091.5	1138.7	4.37	5.18	4.87
IMPLICIT GNP DEFLATOR	135.3	141.6	146.1	152.1	157.6	162.3	165.9	169.6	173.7	178.3	182.9	3.48	2.47	2.89
CONSUMER PRICE INDEX	116.3	121.2	125.3	132.5	135.8	139.7	142.3	145.4	149.1	153.1	157.2	3.62	2.52	2.93
WHSL PRICE INDEX (INDUS COMM)	118.8	114.8	116.3	118.5	121.8	123.8	125.2	126.1	127.1	128.1	128.9	2.88	.74	1.37
PCT CHANGE IN GNPR (ANN RATE)	6.78	7.83	9.57	8.38	6.65	7.45	8.34	8.39	7.92	7.44	7.84	-1.22	-4.14	-1.17
PCT CHANGE IN GNPSR (ANN RATE)	3.84	3.85	6.18	4.88	2.94	4.32	5.98	6.86	5.34	4.69	4.33	9.83	-7.77	3.94
PCT CHANGE IN GNP DEFLATOR	2.94	4.62	3.18	4.13	3.68	3.81	2.22	2.28	2.45	2.63	2.68	-18.19	4.88	-6.18
PCT CHANGE IN CONS PRICE INDEX	4.38	4.14	3.17	4.42	4.88	2.91	1.85	2.16	2.54	2.72	2.67	-8.69	9.58	-4.86
DISPOSABLE PERSONAL INCOME	687.7	743.3	824.6	866.2	923.1	988.4	1058.7	1122.4	1208.9	1278.2	1357.7	7.17	6.62	6.92
CORP PROFITS WITHOUT IVA ADJ.	75.3	81.7	96.8	102.6	110.1	122.8	134.8	146.1	158.1	170.1	181.8	10.55	7.64	9.23
UNEMPLOYMENT RATE	5.3	5.9	5.4	5.7	6.3	6.3	5.7	5.5	5.6	5.5	5.5	1.32	-.77	-.88
PERSONAL SAVINGS RATE	7.8	8.3	7.9	7.4	7.5	7.5	7.6	7.2	6.9	6.6	6.5	-1.42	-3.74	-2.24
FEDERAL GOVT SURPLUS OR DEF	-13.7	-21.4	-18.7	-21.2	-24.7	-18.5	-15.7	-2.2	-1.4	3.5	8.1	******	******	******

THIS FORECAST WAS PREPARED BY CHASE ECONOMETRICS, INC. ON JAN 1971 AND IS THE FORECAST IN A SET OF FORECASTS
THE PRINCIPLE ASSUMPTIONS FOR THIS RUN ARE RECESSION WITH 1ST PERCENT PRICES

VARIABLE NAME	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	ANNUALIZED COMPOUND GROWTH RATES, YEARS- 1-5	6-10	1-10
TABLE 2.1 -- GROSS NATIONAL PRODUCT IN CONSTANT DOLLARS														
GROSS NATIONAL PRODUCT	720.8	742.8	787.9	830.8	844.2	888.6	933.2	989.8	1042.6	1091.5	1138.7	4.37	5.18	4.87
CONSUMPTION EXPENDITURES	496.5	493.9	521.5	545.6	563.4	594.2	616.0	649.1	681.9	711.4	739.3	4.29	4.66	4.59
DURABLE GOODS	92.8	89.5	94.9	98.8	100.3	105.2	115.4	123.5	130.2	136.1	141.6	4.12	5.25	5.22
NONDURABLE GOODS	207.3	213.5	226.5	237.1	244.4	252.8	264.9	276.7	288.6	299.6	310.5	4.32	4.85	4.25
SERVICES	191.3	198.9	208.2	218.7	219.4	226.1	235.7	248.8	263.1	275.7	287.2	4.32	5.86	4.64
GROSS PRIVATE INVESTMENT	109.8	109.8	121.4	124.6	124.9	132.9	144.3	158.3	167.6	174.6	180.8	5.89	5.79	5.78
FIXED INVESTMENT	104.9	106.1	113.7	118.6	121.4	128.2	135.9	146.5	155.7	163.5	170.3	4.84	5.79	5.39
NONRESIDENTIAL	79.2	78.6	85.4	92.9	98.6	104.8	108.8	114.9	122.2	130.2	137.3	7.44	5.97	6.38
STRUCTURES	24.2	23.8	23.7	26.6	28.2	29.4	30.9	32.8	35.3	38.2	40.8	6.31	7.28	6.56
EQUIPMENT	54.4	55.6	61.7	66.3	70.4	75.4	78.8	82.1	86.9	92.8	96.5	7.98	5.48	6.38
RESIDENTIAL STRUCTURES	22.2	27.4	28.3	25.7	23.2	23.4	27.1	31.5	33.5	33.3	33.8	-3.92	5.86	2.87
NONFARM	28.8	27.8	27.9	25.1	22.8	23.8	26.7	31.1	33.1	32.9	32.6	-3.98	5.13	2.18
FARM	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.88	.88	.88
CHANGE IN INVENTORIES	1.3	2.9	7.7	6.8	3.1	4.7	8.4	11.8	11.9	11.1	10.5	12.92	5.72	15.29
NONFARM	2.8	2.2	7.4	6.8	3.1	4.7	8.4	11.8	11.9	11.1	10.5	28.47	5.72	18.65
FARM	.7	.7	.1	.8	.8	.8	.8	.8	.8	.8	.8	******	******	******
NET EXPORTS OF GOODS AND SERV	2.4	1.4	4.8	4.8	4.5	4.6	5.6	5.8	5.8	6.2	7.1	33.56	6.86	19.42
EXPORTS	52.2	54.8	55.3	58.4	58.5	63.7	67.5	71.7	76.1	80.8	85.6	4.21	6.89	5.24
IMPORTS	49.9	52.6	50.5	53.2	55.9	59.1	61.9	65.9	70.3	74.5	78.4	2.97	6.89	4.54
GOVERNMENT PURCHASES	139.5	139.2	148.1	145.8	151.8	159.8	167.3	176.6	187.2	199.4	211.5	3.56	6.84	4.84
FEDERAL	65.4	61.2	58.9	58.8	60.1	61.7	63.8	65.6	68.3	71.7	75.2	.19	4.19	2.31
NATIONAL DEFENSE	59.7	55.5	53.6	52.3	52.6	53.2	54.2	55.8	56.2	57.5	58.8	-1.31	2.54	.79
OTHER	14.7	15.7	15.3	16.4	17.5	18.5	19.6	20.6	22.1	24.2	26.3	4.18	7.64	5.98
STATE AND LOCAL	77.8	77.8	81.2	86.3	91.7	97.3	103.5	111.8	118.9	127.7	136.4	6.83	7.14	6.55
TABLE 2.2 -- IMPLICIT PRICE DEFLATORS FOR GNP														
GROSS NATIONAL PRODUCT	135.3	141.6	146.1	152.1	157.6	162.3	165.9	169.6	173.7	178.3	182.9	3.48	2.47	2.89
CONSUMPTION EXPENDITURES	129.4	134.6	138.1	142.9	147.4	150.8	153.1	155.9	159.2	162.9	166.6	2.87	2.13	2.39
DURABLE GOODS	108.9	113.1	114.2	116.3	118.7	120.7	121.8	123.1	124.7	126.4	128.1	1.44	1.26	1.39
NONDURABLE GOODS	127.7	131.5	134.2	137.7	140.4	142.1	143.4	144.4	146.1	147.8	149.5	1.96	1.12	1.44
SERVICES	142.2	148.2	153.9	161.1	168.3	174.5	179.8	184.9	190.7	197.2	204.8	4.16	3.28	3.61
FIXED INVESTMENT	132.7	140.5	147.8	154.2	161.8	168.7	175.9	181.8	188.8	194.2	200.4	4.47	3.32	4.82
NONRESIDENTIAL	138.8	136.8	142.4	149.5	156.7	164.8	171.7	176.9	182.7	188.8	194.9	4.77	3.22	4.81
STRUCTURES	152.1	147.5	151.3	162.9	185.4	219.5	232.1	243.3	255.8	269.2	283.8	6.99	5.88	5.99
EQUIPMENT	128.1	124.1	127.5	132.8	137.2	143.5	147.8	150.4	153.8	155.4	157.7	3.78	1.64	2.69
RESIDENTIAL	142.4	151.2	160.8	171.6	179.8	185.8	192.5	199.6	207.3	215.2	223.1	5.28	3.75	4.41
NONFARM	142.4	151.3	160.9	171.7	179.2	185.9	192.6	199.6	207.3	215.3	223.1	5.29	3.74	4.41
FARM	138.4	145.2	155.8	163.8	171.8	179.8	185.5	195.8	203.8	211.8	219.8	5.36	4.24	4.66
CHANGE IN INVENTORIES	128.8	135.4	138.2	133.1	136.6	140.5	142.4	143.7	145.1	146.4	147.6	7.44	.89	3.81
EXPORTS	125.2	125.6	130.4	134.4	138.1	141.4	143.8	146.3	149.4	153.7	158.1	3.88	2.48	2.59
IMPORTS	118.4	127.1	136.9	139.4	142.8	146.8	149.1	152.5	156.8	159.6	163.3	3.52	2.38	2.82
GOVERNMENT PURCHASES	157.4	168.3	178.6	188.2	195.5	202.6	208.8	214.6	219.9	225.1	230.6	4.74	2.51	3.55
FEDERAL	148.7	158.2	168.8	181.7	188.5	193.7	197.8	201.1	204.1	206.5	209.8	5.19	1.48	3.13
STATE AND LOCAL	165.8	176.3	186.8	192.6	200.8	208.2	216.1	222.5	228.9	235.6	242.5	4.24	2.92	3.68

THIS FORECAST WAS PREPARED BY CHASE ECONOMETRICS, INC. ON JAN 1971 AND IS THE FORECAST IN A SET OF FORECASTS
THE PRINCIPLE ASSUMPTIONS FOR THIS RUN ARE RECESSION WITH PRICES(1978) AND GOV. OFFSET(1988)

VARIABLE NAME	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	ANNUALIZED COMPOUND GROWTH RATES, YEARS- 1-5	6-10	1-10
TABLE 1.1 -- GROSS NATIONAL PRODUCT IN CURRENT DOLLARS														
GROSS NATIONAL PRODUCT	974.1	1058.4	1158.9	1247.3	1334.1	1444.5	1571.6	1702.3	1835.6	1976.0	2122.3	8.29	7.88	8.12
CONSUMPTION EXPENDITURES	615.9	664.9	723.4	779.8	834.2	885.5	953.8	1023.8	1098.4	1174.9	1252.5	7.42	7.85	7.28
DURABLE GOODS	104.7	101.3	109.3	113.9	110.2	128.2	142.6	154.1	164.8	175.2	184.4	6.87	6.65	6.88
NONDURABLE GOODS	264.7	283.6	304.8	326.4	343.4	361.2	382.8	403.5	425.5	448.8	470.9	6.51	5.32	5.91
SERVICES	242.5	283.8	308.1	339.5	367.7	396.1	428.4	466.2	508.1	551.8	597.2	8.77	8.66	8.64
GROSS PRIVATE INVESTMENT	136.6	152.3	177.2	198.9	208.7	226.1	256.8	287.9	313.3	338.3	362.3	10.78	8.99	10.18
FIXED INVESTMENT	133.9	149.1	167.2	182.9	196.5	218.6	243.1	270.3	296.4	321.8	346.4	10.44	9.26	9.81
NONRESIDENTIAL	109.3	107.6	121.7	138.8	154.7	174.5	198.8	207.8	227.6	251.8	274.9	12.85	9.67	10.97
STRUCTURES	36.9	38.5	42.9	51.3	58.8	64.7	72.3	81.2	92.4	105.7	118.9	13.96	13.25	13.33
EQUIPMENT	65.3	69.1	78.8	87.5	96.7	109.7	117.7	125.8	135.2	146.1	156.8	12.27	7.29	9.46
RESIDENTIAL STRUCTURES	31.7	41.5	45.6	44.1	41.8	44.2	53.1	63.4	68.9	70.1	71.6	1.54	7.74	6.22
NONFARM	31.1	41.8	44.9	43.5	41.1	43.4	52.4	62.6	68.1	69.2	70.7	1.48	7.79	6.24
CHANGE IN INVENTORIES	2.8	3.2	10.8	8.8	4.2	7.5	13.7	17.6	16.8	16.4	15.9	23.96	3.79	19.65
NET EXPORTS OF GOODS AND SERV	3.9	1.8	2.9	3.7	3.6	3.4	3.8	3.8	2.7	3.6	5.5	34.35	9.63	20.38
EXPORTS	62.9	67.9	72.1	78.4	83.5	98.1	97.2	105.8	113.7	124.2	135.5	7.34	8.66	7.98
IMPORTS	59.8	66.8	69.2	74.3	80.8	86.7	93.4	102.8	111.8	120.6	130.8	6.73	8.62	7.67
GOVERNMENT PURCHASES	219.4	232.6	258.3	272.9	299.7	329.6	357.4	387.7	421.1	459.2	502.8	9.18	8.87	8.91
FEDERAL	97.3	96.8	108.1	106.7	113.3	119.5	125.7	132.7	141.2	150.2	159.8	5.39	6.18	5.72
NATIONAL DEFENSE	75.3	72.8	74.8	76.9	80.3	83.6	87.1	90.5	94.3	98.1	102.1	3.82	4.85	3.95
OTHER	21.9	24.8	26.8	29.8	33.8	35.8	38.6	42.2	46.9	52.1	57.7	9.59	10.56	9.81
STATE AND LOCAL	122.2	135.7	150.2	166.2	186.4	210.1	231.6	254.9	279.9	308.9	342.2	11.53	10.25	10.81
TABLE 1.2 -- OTHER MAJOR ECONOMIC INDICATORS														
MONEY SUPPLY WITHOUT TIME DEP	212.5	224.4	238.5	256.2	274.7	298.5	326.5	355.1	383.7	411.6	434.8	7.49	7.43	7.62
MONEY SUPPLY WITH TIME DEPOSIT	428.4	479.1	526.5	571.3	621.2	684.2	752.2	827.6	905.1	984.4	1068.8	9.38	8.66	9.11
TREASURY BILL RATE, 91-DAY	6.46	4.34	4.66	5.31	6.83	6.35	6.88	3.77	3.59	3.78	4.95	.87	5.51	1.49
CORPORATE BOND RATE, NEW ISSUE	9.25	7.98	7.95	7.77	7.39	7.83	6.84	6.49	6.89	5.83	6.21	-2.88	-2.38	-2.64
INDEX OF INDUS PROD, TOTAL	106.5	106.7	114.5	118.6	121.5	124.3	138.2	148.1	155.8	163.6	178.8	4.71	5.24	5.38
INDEX OF INDUS PROD, MFG.	105.1	104.9	113.1	116.1	116.9	123.8	133.9	142.8	150.5	158.4	165.7	4.84	5.48	5.28
INDEX OF INDUS PROD, STEEL	104.8	95.9	99.9	112.1	107.8	113.7	132.7	152.8	163.8	169.8	174.6	4.34	7.18	6.88
INDEX OF CAPACITY UTILIZATION	82.7	81.8	86.8	85.5	84.8	85.8	89.3	91.3	92.1	92.4	92.1	1.23	.81	1.33
NEW PASSENGER CAR SALES,SAAR	8.46	10.33	11.33	11.14	10.47	10.65	11.77	12.61	13.28	13.64	13.82	.77	4.89	3.28
TOTAL PRIVATE HOUSING STARTS	1.46	2.88	2.81	1.88	1.68	1.81	2.14	2.45	2.56	2.51	2.46	-2.52	3.52	2.31
GNP IN 1958 DOLLARS	728.8	742.8	787.9	822.8	846.2	889.8	945.9	1001.1	1051.7	1101.8	1149.2	4.62	4.99	4.98
IMPLICIT GNP DEFLATOR	135.3	141.6	146.1	152.1	157.6	162.5	166.1	170.4	174.5	179.5	184.7	3.58	2.68	2.99
CONSUMER PRICE INDEX	116.3	121.2	125.8	132.5	138.8	139.7	142.4	145.8	149.8	154.3	159.8	3.42	2.78	3.86
WHSL PRICE INDEX (INDUS COMM)	118.8	114.8	114.3	118.5	121.8	123.8	125.2	126.3	127.4	128.6	129.6	2.89	.86	1.43
PCT CHANGE IN GNPS (ANN RATE)	6.78	7.83	8.67	8.38	6.96	8.37	8.88	8.32	7.83	7.65	7.41	1.78	-4.23	-.51
PCT CHANGE IN GNPSA (ANN RATE)	3.84	3.85	6.18	4.88	3.19	5.38	6.48	5.83	5.26	4.68	4.38	13.46	-9.83	4.89
PCT CHANGE IN GNP DEFLATOR	2.94	4.42	3.18	4.13	3.65	3.85	2.26	2.35	2.64	2.89	2.98	-9.85	6.48	-5.85
PCT CHANGE IN CONS PRICE INDEX	4.38	4.19	3.17	4.42	3.99	2.91	1.95	2.35	2.76	2.43	3.84	-8.78	11.71	-3.58
DISPOSABLE PERSONAL INCOME	687.7	743.3	804.6	866.2	924.2	987.9	1063.3	1134.6	1214.7	1296.1	1381.5	7.37	6.76	7.12
CORP PROFITS WITHOUT IVA ADJ.	75.3	81.7	96.8	102.6	110.5	124.2	138.1	149.8	161.8	173.8	185.8	11.83	7.59	9.58
UNEMPLOYMENT RATE	5.8	5.9	5.4	5.7	6.3	6.2	5.6	5.5	5.4	5.4	5.4	1.82	-.97	-1.87
PERSONAL SAVINGS RATE	7.9	8.8	7.9	7.4	7.6	7.8	7.7	7.1	6.9	6.6	6.6	-.68	-3.85	-2.11
FEDERAL GOVT SURPLUS OR DEF	-13.7	-21.4	-18.7	-21.2	-27.1	-22.2	-21.1	-5.8	-4.8	.7	3.9	******	******	******

THIS FORECAST WAS PREPARED BY CHASE ECONOMETRICS, INC. ON JAN 1971 AND IS THE FORECAST IN A SET OF FORECASTS
THE PRINCIPLE ASSUMPTIONS FOR THIS RUN ARE RECESSION WITH PRICES(1AA) AND GOV. OFFSET(1##)

VARIABLE NAME	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	ANNUALIZED COMPOUND GROWTH RATES,YEARS- 1-5	6-10	1-10
TABLE 2.1 -- GROSS NATIONAL PRODUCT IN CONSTANT DOLLARS														
GROSS NATIONAL PRODUCT	724.0	742.0	787.9	828.3	866.2	889.0	945.9	1001.1	1051.7	1101.0	1149.2	4.62	4.99	4.80
CONSUMPTION EXPENDITURES	496.5	493.9	521.5	545.6	563.4	587.3	622.4	655.3	687.4	717.2	745.3	4.43	4.61	4.67
DURABLE GOODS	92.0	89.5	94.0	98.0	100.4	106.2	116.9	124.9	131.7	137.9	143.0	4.35	5.15	5.38
NONDURABLE GOODS	207.3	213.5	226.5	237.1	244.5	254.2	267.4	278.9	290.4	301.7	312.9	4.46	4.00	4.34
SERVICES	191.3	190.9	200.2	210.7	218.4	227.0	238.0	251.6	265.3	277.6	289.3	4.42	5.00	4.72
GROSS PRIVATE INVESTMENT	109.0	109.0	121.4	124.6	125.1	134.9	147.7	148.5	168.4	175.7	181.0	5.47	5.32	5.00
FIXED INVESTMENT	108.0	106.1	113.7	118.6	122.0	129.6	138.1	148.3	156.9	164.5	171.1	5.13	5.50	5.45
NONRESIDENTIAL	79.2	78.6	85.4	92.9	98.7	105.9	113.7	116.8	123.9	132.3	139.5	7.71	5.96	6.97
STRUCTURES	24.2	23.0	23.7	26.6	28.2	29.5	31.1	33.3	35.9	38.9	41.5	6.38	7.49	6.77
EQUIPMENT	54.4	55.6	61.7	66.3	70.5	76.4	79.6	83.5	88.0	93.4	98.0	8.29	5.34	6.49
RESIDENTIAL STRUCTURES	22.2	27.4	28.3	25.7	23.3	23.7	27.5	31.6	33.0	32.2	31.6	-3.57	3.56	1.58
NONFARM	28.0	27.0	27.9	25.3	22.9	23.3	27.1	31.2	32.6	31.9	31.2	-3.83	3.61	1.00
FARM	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.00	.00	.00
CHANGE IN INVENTORIES	1.3	2.9	7.7	6.0	3.1	5.3	9.6	12.2	11.5	11.2	10.7	16.21	2.73	19.96
NONFARM	2.0	2.2	7.6	6.0	3.1	5.3	9.6	12.2	11.6	11.2	10.7	23.97	2.73	19.93
FARM	.7	.7	.1	.0	.0	.0	.0	.0	.0	.0	.0	******	******	******
NET EXPORTS OF GOODS AND SERV	2.4	1.4	4.0	4.0	4.5	4.3	4.9	4.8	4.0	4.0	5.0	11.60	3.00	14.14
EXPORTS	52.2	54.0	55.3	58.0	60.5	63.7	67.5	71.7	75.9	80.5	85.1	4.21	5.96	5.10
IMPORTS	49.0	52.6	50.5	53.2	56.0	59.4	62.6	66.9	71.1	75.5	79.0	3.99	6.17	5.71
GOVERNMENT PURCHASES	139.5	138.2	148.1	145.0	153.3	162.5	170.9	180.4	191.1	203.2	216.0	4.14	6.10	5.11
FEDERAL	65.4	61.2	58.9	58.0	60.1	61.7	63.0	66.0	69.1	72.6	76.3	.19	4.57	2.47
NATIONAL DEFENSE	50.7	45.5	43.6	42.3	42.6	43.2	44.2	45.0	46.1	47.4	48.7	-1.31	2.47	.70
OTHER	14.7	15.7	15.3	16.4	17.5	18.5	19.6	21.0	23.0	25.2	27.6	4.17	8.00	6.44
STATE AND LOCAL	77.9	77.0	81.2	86.3	93.2	100.9	107.1	114.4	122.0	130.5	140.3	6.00	6.90	6.00
TABLE 2.2 -- IMPLICIT PRICE DEFLATORS FOR GNP														
GROSS NATIONAL PRODUCT	135.3	141.6	146.1	152.1	157.6	162.5	166.1	178.0	174.5	179.5	184.7	3.50	2.60	2.99
CONSUMPTION EXPENDITURES	130.4	134.6	138.1	142.9	147.4	150.0	153.2	156.2	159.9	163.0	166.0	2.87	2.33	2.69
DURABLE GOODS	108.9	113.1	114.2	116.3	118.7	120.7	121.9	123.3	125.1	127.0	129.0	1.65	1.41	1.47
NONDURABLE GOODS	127.7	131.5	134.2	137.7	140.4	142.1	143.1	144.7	146.5	148.0	150.0	1.90	1.20	1.91
SERVICES	142.2	148.2	153.0	161.1	166.3	174.5	180.3	185.3	191.5	198.7	206.4	4.17	3.40	3.74
FIXED INVESTMENT	132.7	140.5	147.0	154.2	161.0	168.7	175.0	182.2	188.0	195.4	202.4	4.67	3.57	4.14
NONRESIDENTIAL	138.3	146.0	149.2	149.5	156.7	164.0	171.7	177.3	183.7	190.3	197.0	4.78	3.90	4.13
STRUCTURES	152.1	167.5	181.3	192.9	205.4	219.7	232.5	244.1	257.3	271.4	286.4	7.91	5.35	6.13
EQUIPMENT	128.1	128.1	127.5	132.0	137.2	143.6	147.9	152.6	153.6	156.4	159.2	3.71	1.85	2.80
RESIDENTIAL	142.4	151.2	160.0	171.6	179.1	186.0	193.1	200.5	208.0	217.5	226.4	5.31	4.00	4.58
NONFARM	142.4	151.3	160.0	171.7	179.2	186.1	193.2	200.6	208.0	217.6	226.4	5.31	4.05	4.58
FARM	138.6	145.2	155.0	163.0	171.0	179.0	185.5	195.0	203.0	211.0	219.0	5.36	4.24	4.66
CHANGE IN INVENTORIES	138.0	135.4	138.2	133.1	136.5	140.5	142.5	143.9	145.0	147.0	148.9	1.60	1.04	1.00
EXPORTS	125.2	125.6	130.4	134.4	138.1	141.3	143.0	146.5	149.0	154.4	159.1	3.00	2.55	2.66
IMPORTS	110.0	127.1	136.0	139.0	142.0	144.1	149.1	152.6	156.0	159.7	163.3	3.52	2.31	2.02
GOVERNMENT PURCHASES	157.4	164.3	170.6	180.2	195.5	202.0	209.1	214.9	220.4	226.0	231.0	4.76	2.61	3.61
FEDERAL	148.7	154.2	170.0	181.7	188.5	193.0	197.1	201.2	204.3	208.9	209.9	5.19	1.54	3.17
STATE AND LOCAL	165.0	174.3	184.0	192.6	200.0	209.2	216.2	222.0	229.5	236.6	243.9	4.25	3.06	3.66

THIS FORECAST WAS PREPARED BY CHASE ECONOMETRICS, INC. ON JAN 1971 AND IS THE FORECAST IN A SET OF FORECASTS

THE PRINCIPLE ASSUMPTIONS FOR THIS RUN ARE RECESSION WITH 75 PERCENT PRICES

TABLE 1.1 -- GROSS NATIONAL PRODUCT IN CURRENT DOLLARS

VARIABLE NAME	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	ANNUALIZED COMPOUND GROWTH RATES,YEARS- 1-5	6-10	1-10
GROSS NATIONAL PRODUCT	974.1	1053.4	1149.9	1246.3	1328.6	1427.3	1545.7	1674.6	1805.2	1938.7	2075.5	7.97	7.65	7.85
CONSUMPTION EXPENDITURES	615.9	664.9	719.9	779.8	828.3	878.6	948.6	1008.5	1081.1	1153.8	1225.5	7.22	6.84	7.02
DURABLE GOODS	104.7	101.3	108.2	114.8	119.8	126.5	139.6	150.4	160.2	169.8	179.1	5.73	6.43	6.53
NONDURABLE GOODS	264.7	288.6	303.8	326.1	342.8	358.9	378.3	399.2	420.8	441.8	463.1	6.34	5.18	5.72
SERVICES	262.5	283.8	307.9	338.9	366.5	393.2	422.7	458.9	500.1	541.4	583.3	8.57	8.39	8.36
GROSS PRIVATE INVESTMENT	136.6	152.3	176.5	198.2	199.2	221.8	249.9	281.5	307.2	338.6	353.9	9.86	9.85	9.81
FIXED INVESTMENT	133.8	149.1	166.6	182.2	194.8	214.5	237.5	264.6	298.3	314.6	338.5	9.52	9.26	9.53
NONRESIDENTIAL	109.3	107.6	121.8	137.8	152.6	170.2	184.6	201.5	221.8	243.2	264.7	12.16	9.43	10.51
STRUCTURES	36.8	38.5	42.9	51.2	57.7	64.1	71.2	79.5	89.8	102.2	114.7	13.58	12.67	12.87
EQUIPMENT	65.3	69.1	78.1	86.6	94.9	106.1	113.4	122.8	131.2	141.1	150.1	11.34	7.25	9.08
RESIDENTIAL STRUCTURES	31.7	41.5	45.6	44.4	42.2	44.3	53.8	63.1	69.2	71.4	73.8	1.62	8.66	6.59
NONFARM	31.1	41.8	45.9	43.7	41.5	43.6	52.2	62.3	68.4	70.6	73.8	1.56	8.71	6.62
CHANGE IN INVENTORIES	2.8	3.2	9.9	8.3	4.4	7.3	12.3	17.8	17.8	15.9	15.4	23.14	5.65	19.22
NET EXPORTS OF GOODS AND SERV	3.9	1.8	3.1	3.9	4.3	4.9	6.8	5.5	5.1	6.3	8.3	47.61	8.47	26.86
EXPORTS	62.9	67.9	72.1	78.8	83.5	98.1	97.1	105.8	113.6	124.8	135.1	7.33	8.68	7.95
IMPORTS	59.1	66.8	69.8	74.1	79.2	85.2	91.1	99.5	108.5	117.8	126.8	6.25	8.61	7.37
GOVERNMENT PURCHASES	219.4	232.6	258.3	272.9	296.7	322.1	349.4	378.9	411.5	448.9	487.8	8.48	8.78	8.57
FEDERAL	97.2	96.8	108.1	106.7	113.3	119.5	125.7	132.8	139.4	148.8	157.1	5.39	5.73	5.52
NATIONAL DEFENSE	75.3	72.8	74.8	76.9	80.3	83.6	87.1	90.5	94.3	98.1	102.1	3.82	4.85	3.95
OTHER	21.9	24.8	26.8	29.8	33.8	35.8	38.6	41.4	45.1	49.9	55.8	9.59	9.23	9.22
STATE AND LOCAL	122.2	135.7	150.2	166.2	183.4	202.6	223.5	246.9	272.1	300.9	330.7	10.53	10.27	10.39

TABLE 1.2 -- OTHER MAJOR ECONOMIC INDICATORS

MONEY SUPPLY WITHOUT TIME DEP	212.5	224.4	239.4	256.2	274.4	297.7	322.7	348.8	374.5	399.8	422.8	7.33	6.94	7.26
MONEY SUPPLY WITH TIME DEPOSIT	428.6	478.1	526.2	578.7	618.4	675.3	737.6	807.8	879.4	952.9	1026.8	9.82	8.62	8.86
TREASURY BILL RATE, 91-DAY	6.44	4.34	4.68	5.31	5.82	4.69	4.29	4.83	3.89	3.94	4.88	1.97	-1.71	-.89
CORPORATE BOND RATE, NEW ISSUE	9.25	7.98	7.95	7.77	7.48	7.21	7.87	6.78	6.45	6.19	6.83	-2.26	-3.89	-2.95
INDEX OF INDUS PROD, TOTAL	106.5	106.7	114.3	118.6	121.9	128.1	138.4	147.7	155.6	163.1	170.6	4.68	5.37	5.35
INDEX OF INDUS PROD, MFG.	105.1	104.9	113.8	116.1	117.2	122.8	133.1	142.4	150.4	158.8	165.5	4.81	5.61	5.19
INDEX OF INDUS PROD, STEEL	106.8	95.9	108.8	118.6	108.3	114.1	131.4	152.2	164.7	171.5	178.8	4.44	7.87	7.18
INDEX OF CAPACITY UTILIZATION	82.7	81.8	85.9	85.6	84.2	85.7	98.8	91.2	91.8	91.8	91.8	1.18	.83	1.38
NEW PASSENGER CAR SALES,SAAR	8.44	10.33	11.21	11.22	10.85	11.87	12.18	12.86	13.34	13.74	14.08	1.75	3.85	3.58
TOTAL PRIVATE HOUSING STARTS	1.46	2.08	2.01	1.82	1.78	1.82	2.16	2.47	2.61	2.68	2.61	-2.33	4.85	2.98
GNP IN 1958 DOLLARS	728.7	742.8	787.4	828.1	845.3	883.5	937.8	993.5	1045.5	1094.3	1142.6	4.46	5.88	4.91
IMPLICIT GNP DEFLATOR	135.3	141.6	146.2	151.9	157.2	161.5	164.9	168.5	172.7	177.1	181.6	3.36	2.44	2.81
CONSUMER PRICE INDEX	116.3	121.2	125.8	130.3	135.2	138.9	141.3	144.4	148.8	152.8	155.9	3.46	2.49	2.84
WHSL PRICE INDEX (INDUS COMM)	113.8	114.8	116.3	118.3	128.6	123.8	124.2	125.1	124.1	127.8	127.8	1.91	.71	1.27
PCT CHANGE IN GNP$ (ANN RATE)	6.78	7.83	9.47	8.36	6.62	7.44	8.29	8.34	7.88	7.39	7.86	-1.28	-3.95	-1.14
PCT CHANGE IN GNP58 (ANN RATE)	3.84	3.35	6.11	4.16	3.87	4.51	6.86	6.83	5.23	4.67	4.41	10.24	-7.64	4.16
PCT CHANGE IN GNP DEFLATOR	2.94	4.42	3.15	4.14	3.45	2.83	2.18	2.18	2.45	2.68	2.54	-11.88	4.84	-6.44
PCT CHANGE IN CONS PRICE INDEX	4.33	4.19	3.12	4.31	3.75	2.67	1.76	2.17	2.55	2.66	2.58	-18.61	9.98	-5.22
DISPOSABLE PERSONAL INCOME	687.7	743.3	804.1	865.6	922.4	974.9	1048.6	1128.2	1197.6	1273.9	1353.2	7.13	6.58	6.88
CORP PROFITS WITHOUT IVA ADJ.	75.3	81.7	96.4	102.2	109.8	121.4	134.2	145.3	156.8	168.5	179.3	10.48	7.52	9.12
UNEMPLOYMENT RATE	5.8	5.9	5.4	5.8	6.3	6.3	5.7	5.6	5.6	5.5	5.5	1.33	-.75	-.83
PERSONAL SAVINGS RATE	7.8	8.8	7.9	7.5	7.6	7.6	7.7	7.3	7.8	6.8	6.7	-1.15	-3.42	-1.97
FEDERAL GOVT SURPLUS OR DEF	-13.7	-21.4	-18.9	-21.4	-27.3	-19.2	-14.5	-3.1	-2.8	1.8	6.3	******	******	******

THIS FORECAST WAS PREPARED BY CHASE ECONOMETRICS, INC. ON JAN 1971 AND IS THE FORECAST IN A SET OF FORECASTS
THE PRINCIPLE ASSUMPTIONS FOR THIS RUN ARE RECESSION WITH 75 PERCENT PRICES

TABLE 2.1 -- GROSS NATIONAL PRODUCT IN CONSTANT DOLLARS

VARIABLE NAME	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	ANNUALIZED COMPOUND GROWTH RATES,YEARS- 1-5	6-10	1-10
GROSS NATIONAL PRODUCT	720.0	742.0	787.4	820.1	845.3	883.5	937.0	993.5	1045.5	1094.3	1142.6	4.46	5.00	4.91
CONSUMPTION EXPENDITURES	496.5	493.9	521.3	545.6	563.4	584.9	616.0	649.6	681.9	711.2	739.5	4.32	4.64	4.58
DURABLE GOODS	92.0	89.5	94.9	98.1	100.7	105.5	115.4	123.0	129.4	135.3	140.9	4.19	5.13	5.16
NONDURABLE GOODS	247.3	243.5	226.5	237.0	244.6	253.4	265.5	277.3	289.1	300.0	311.1	4.38	4.85	4.27
SERVICES	191.3	198.9	200.1	210.5	218.2	226.0	236.0	249.2	263.4	275.8	287.4	4.31	5.85	4.65
GROSS PRIVATE INVESTMENT	109.0	109.0	120.9	124.3	124.6	133.3	145.3	159.2	168.1	175.0	181.7	5.17	5.75	5.83
FIXED INVESTMENT	108.0	106.1	113.3	118.3	121.4	128.1	136.5	147.2	156.3	164.0	171.1	4.84	5.81	5.45
NONRESIDENTIAL	79.2	78.6	84.9	92.4	97.8	104.2	108.8	115.4	122.6	130.6	137.7	7.29	6.86	6.42
STRUCTURES	24.2	23.0	23.7	26.6	28.3	29.5	31.1	33.1	35.6	38.5	41.1	6.42	7.27	6.67
EQUIPMENT	54.4	55.6	61.3	65.8	69.5	74.7	77.8	82.3	87.0	92.1	96.6	7.64	5.57	6.32
RESIDENTIAL STRUCTURES	28.8	27.4	28.4	25.9	23.6	23.9	27.7	31.8	33.6	33.4	33.4	-3.35	4.88	2.19
NONFARM	28.0	27.0	28.0	25.5	23.2	23.5	27.3	31.4	33.2	33.0	33.0	-3.48	4.86	2.22
FARM	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.00	.00	.00
CHANGE IN INVENTORIES	1.3	2.9	7.6	6.0	3.3	5.2	8.8	11.9	11.8	11.0	10.5	15.69	4.76	15.37
NONFARM	2.0	2.2	7.5	6.0	3.3	5.2	8.0	11.9	11.0	11.0	10.5	23.41	4.76	18.73
FARM	.7	.7	.1	.0	.0	.0	.0	.0	.0	.0	.0	******	******	******
NET EXPORTS OF GOODS AND SERV	2.4	1.4	4.9	5.0	5.1	5.6	6.7	6.7	6.0	7.2	8.2	48.85	5.30	21.26
EXPORTS	52.2	54.0	55.3	58.0	60.6	63.9	67.0	72.0	76.3	81.0	85.9	4.29	6.00	5.20
IMPORTS	49.0	52.6	50.4	53.0	55.5	58.3	61.1	65.2	69.6	73.0	77.7	2.64	6.16	4.42
GOVERNMENT PURCHASES	139.5	138.2	148.2	145.2	152.1	159.7	168.4	177.9	188.6	201.0	213.3	3.68	6.89	4.94
FEDERAL	65.4	61.2	58.9	58.0	60.2	61.9	64.1	66.0	68.7	72.1	75.6	.27	4.22	2.37
NATIONAL DEFENSE	50.7	45.5	43.6	42.4	42.7	43.3	44.4	45.3	46.4	47.8	49.1	-1.23	2.57	.85
OTHER	14.7	15.7	15.3	16.4	17.6	18.6	19.7	20.7	22.2	24.3	26.5	4.26	7.67	5.97
STATE AND LOCAL	77.0	77.0	81.3	86.4	91.9	97.8	104.3	111.9	119.9	128.9	137.7	6.17	7.19	6.67

TABLE 2.2 -- IMPLICIT PRICE DEFLATORS FOR GNP

GROSS NATIONAL PRODUCT	135.3	141.6	146.2	151.9	157.2	161.5	164.9	168.5	172.7	177.1	181.6	3.36	2.44	2.81
CONSUMPTION EXPENDITURES	129.4	134.6	138.1	142.8	147.0	150.2	152.5	155.2	158.5	162.1	165.7	2.78	2.10	2.33
DURABLE GOODS	108.9	113.1	114.2	116.1	118.2	119.9	121.3	122.2	123.0	125.5	127.1	1.48	1.24	1.30
NONDURABLE GOODS	127.7	131.5	134.1	137.6	141.1	141.7	142.5	143.9	145.6	147.2	148.8	1.88	1.89	1.39
SERVICES	148.2	149.2	153.0	161.0	168.0	173.9	179.1	184.1	189.0	196.3	202.9	3.88	3.17	3.55
FIXED INVESTMENT	132.7	140.5	147.0	154.0	160.4	167.4	174.0	179.7	185.7	191.0	197.0	4.47	3.26	3.87
NONRESIDENTIAL	138.1	136.0	142.4	149.2	156.1	163.1	169.6	174.5	180.2	186.2	192.2	4.54	3.18	3.84
STRUCTURES	152.1	147.5	151.1	162.4	244.2	217.2	228.9	239.8	252.1	265.2	278.6	6.71	5.83	5.81
EQUIPMENT	128.1	124.1	127.5	131.7	136.5	142.1	145.8	148.2	150.0	153.2	155.3	3.43	1.59	2.52
RESIDENTIAL	142.4	151.2	160.7	171.3	178.5	184.9	191.3	198.2	205.0	213.5	221.2	5.15	3.78	4.31
NONFARM	142.4	151.3	160.0	171.4	178.6	185.0	191.4	198.3	205.0	213.6	221.2	5.15	3.69	4.31
FARM	139.6	145.2	155.3	163.0	171.0	179.0	185.5	195.0	203.0	211.0	219.0	5.36	4.24	4.66
CHANGE IN INVENTORIES	123.0	125.4	130.1	132.9	136.0	139.4	141.0	142.3	143.6	144.9	145.9	7.24	.86	3.68
EXPORTS	125.2	125.6	130.4	134.3	137.9	140.9	143.3	145.8	148.9	153.1	157.4	2.92	2.30	2.54
IMPORTS	118.6	127.1	136.9	139.0	142.0	145.9	149.0	152.5	156.0	159.6	163.2	3.51	2.30	2.82
GOVERNMENT PURCHASES	157.4	168.3	178.6	188.0	195.0	201.7	207.4	213.0	218.2	223.4	228.7	4.62	2.47	3.46
FEDERAL	148.7	158.2	170.0	181.6	188.2	193.1	196.1	200.1	203.0	205.4	207.0	5.11	1.45	3.07
STATE AND LOCAL	165.0	176.3	184.0	192.4	199.5	207.1	214.4	220.5	226.0	233.4	240.2	4.10	2.88	3.49

THIS FORECAST WAS PREPARED BY CHASE ECONOMETRICS, INC. ON JAN 1971 AND IS THE FORECAST IN A SET OF FORECASTS
THE PRINCIPLE ASSUMPTIONS FOR THIS RUN ARE RECESSION WITH PRICES(A75) AND GOV. OFFSET(A75)

VARIABLE NAME	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	ANNUALIZED COMPOUND GROWTH RATES,YEARS- 1-5	6-10	1-10
TABLE 1.1 -- GROSS NATIONAL PRODUCT IN CURRENT DOLLARS														
GROSS NATIONAL PRODUCT	974.1	1052.4	1149.9	1246.8	1331.4	1438.8	1561.1	1689.3	1820.9	1957.6	2095.2	8.17	7.63	7.97
CONSUMPTION EXPENDITURES	615.9	664.9	719.9	779.3	828.6	891.6	966.8	1044.8	1128.1	1163.3	1238.8	7.31	6.93	7.14
DURABLE GOODS	104.7	101.3	108.2	114.3	119.1	127.2	140.6	151.5	161.9	171.9	180.8	5.87	6.37	6.68
NONDURABLE GOODS	264.7	283.6	303.8	326.1	342.9	368.2	398.9	431.3	463.1	445.2	467.3	6.44	5.25	5.82
SERVICES	262.5	283.8	307.9	338.9	366.5	394.1	425.3	461.9	503.1	546.2	590.6	8.63	8.56	8.51
GROSS PRIVATE INVESTMENT	136.6	152.3	176.5	198.2	199.4	223.9	253.7	284.5	309.7	334.3	356.2	10.12	8.86	9.89
FIXED INVESTMENT	133.8	149.1	166.6	182.2	195.8	216.1	243.2	267.3	292.9	317.9	340.6	9.72	9.13	9.68
NONRESIDENTIAL	109.3	117.6	121.4	137.8	152.7	171.4	186.5	203.6	223.9	247.3	269.1	12.34	9.59	10.71
STRUCTURES	36.8	38.5	42.9	51.2	57.7	64.2	71.5	80.3	91.2	104.2	117.8	13.63	13.88	13.12
EQUIPMENT	65.3	69.1	78.1	86.6	95.8	107.2	115.8	123.4	132.7	143.1	152.1	11.61	7.24	9.16
RESIDENTIAL STRUCTURES	31.7	41.5	45.6	44.4	42.3	44.8	53.7	63.6	69.1	78.6	71.6	1.89	7.46	6.22
NONFARM	31.1	41.8	45.8	43.7	41.6	44.8	52.9	62.9	68.3	69.8	78.7	1.83	7.58	6.24
CHANGE IN INVENTORIES	2.8	3.2	9.9	8.8	4.5	7.8	13.5	17.2	16.8	16.4	15.6	25.41	3.79	10.43
NET EXPORTS OF GOODS AND SERV	3.9	1.8	3.1	3.9	4.3	4.7	5.3	4.6	4.3	5.2	7.2	45.62	7.59	23.94
EXPORTS	62.9	67.9	72.1	78.8	83.5	88.1	97.2	105.8	113.7	124.1	135.3	7.34	8.62	7.96
IMPORTS	59.1	66.8	69.8	74.1	79.3	85.4	91.8	100.4	109.4	118.9	128.1	6.33	8.68	7.49
GOVERNMENT PURCHASES	219.4	232.6	253.3	272.9	299.8	327.7	355.4	385.5	418.7	454.7	493.7	8.95	8.57	8.71
FEDERAL	97.2	96.8	108.1	116.7	113.3	119.5	125.7	132.6	140.8	147.8	154.4	5.39	5.27	5.31
NATIONAL DEFENSE	75.3	72.8	74.8	76.9	88.3	83.6	87.1	90.5	94.3	98.1	102.1	3.82	4.85	3.95
OTHER	21.9	24.8	26.8	29.8	33.1	35.8	38.6	42.1	46.5	49.7	52.3	9.59	7.87	8.62
STATE AND LOCAL	122.2	135.7	158.2	166.2	185.6	208.2	229.6	252.9	278.8	306.9	339.3	11.28	10.25	10.78
TABLE 1.2 -- OTHER MAJOR ECONOMIC INDICATORS														
MONEY SUPPLY WITHOUT TIME DEP	212.5	224.4	239.4	256.2	274.7	299.3	325.8	353.8	381.7	408.8	428.8	7.47	7.86	7.43
MONEY SUPPLY WITH TIME DEPOSIT	428.6	478.1	526.3	578.7	619.7	688.6	746.9	828.6	896.3	973.9	1025.1	9.23	8.23	8.84
TREASURY BILL RATE, 91-DAY	6.44	4.34	4.68	5.31	4.89	4.45	4.83	5.77	3.68	3.78	5.52	.63	8.19	2.72
CORPORATE BOND RATE, NEW ISSUE	9.85	7.98	7.95	7.77	7.42	7.87	8.87	8.51	8.12	5.85	8.58	-2.72	-1.48	-2.15
INDEX OF INDUS PROD, TOTAL	106.5	106.7	114.3	118.6	122.8	128.8	139.6	148.5	156.4	164.4	171.3	4.83	5.24	5.39
INDEX OF INDUS PROD, MFG.	105.1	104.9	113.8	116.1	117.3	123.6	134.3	143.3	151.3	159.3	166.2	4.17	5.47	5.24
INDEX OF INDUS PROD, STEEL	106.8	95.9	108.8	118.6	108.5	115.9	134.8	154.8	165.8	172.3	176.9	4.85	7.84	7.83
INDEX OF CAPACITY UTILIZATION	82.7	81.8	85.9	85.6	84.3	86.8	89.1	91.3	92.1	92.4	91.8	1.27	.75	1.38
NEW PASSENGER CAR SALES,SAAR	8.44	10.33	11.21	11.22	10.87	11.16	12.21	12.98	13.54	13.98	13.99	1.96	3.46	3.43
TOTAL PRIVATE HOUSING STARTS	1.46	2.08	2.01	1.92	1.71	1.84	2.18	2.48	2.68	2.56	2.48	-2.85	3.25	2.39
GNP IN 1958 DOLLARS	728.8	742.8	787.4	828.1	846.9	889.6	945.8	1001.3	1053.8	1102.3	1147.9	4.44	4.96	4.96
IMPLICIT GNP DEFLATOR	135.3	141.6	146.3	151.9	157.2	161.8	165.8	168.7	172.9	177.6	182.5	3.37	2.55	2.86
CONSUMER PRICE INDEX	116.3	121.2	125.8	130.3	135.2	138.8	141.3	144.4	148.2	152.4	156.9	3.46	2.64	2.91
WHSL PRICE INDEX (INDUS COMM)	118.8	114.8	116.3	118.3	128.5	123.8	124.2	125.1	126.1	127.1	128.8	1.91	.77	1.29
PCT CHANGE IN GNP$ (ANN RATE)	6.78	7.83	9.47	8.36	6.85	8.08	8.56	8.22	7.79	7.51	7.83	.55	-4.81	-1.19
PCT CHANGE IN GNP58 (ANN RATE)	3.84	3.85	6.11	4.16	3.26	5.04	6.33	5.86	5.16	4.69	4.13	13.34	-18.18	3.41
PCT CHANGE IN GNP DEFLATOR	2.94	4.62	3.15	4.84	3.48	2.92	2.18	2.22	2.58	2.69	2.78	-11.61	7.31	-5.48
PCT CHANGE IN CONS PRICE INDEX	4.33	4.19	3.12	4.31	3.75	2.47	1.88	2.28	2.59	2.85	2.94	-18.68	13.12	-3.85
DISPOSABLE PERSONAL INCOME	687.7	743.3	804.1	865.6	923.4	984.2	1056.6	1126.8	1205.6	1285.8	1368.8	7.27	6.67	7.81
CORP PROFITS WITHOUT IVA ADJ.	75.3	81.7	96.4	102.2	110.8	122.8	136.2	147.1	158.8	171.8	181.1	10.72	7.38	9.24
UNEMPLOYMENT RATE	5.8	5.9	5.4	5.8	6.3	6.3	5.7	5.5	5.5	5.4	5.5	1.31	-.87	-.88
PERSONAL SAVINGS RATE	7.8	8.8	7.9	7.5	7.7	7.8	7.8	7.3	7.1	6.8	6.8	-.52	-3.49	-1.84
FEDERAL GOVT SURPLUS OR DEF	-13.7	-21.4	-18.9	-21.4	-27.4	-22.1	-21.1	-6.5	-5.8	1.3	6.4	******	******	******

THIS FORECAST WAS PREPARED BY CHASE ECONOMETRICS, INC. ON JAN 1971 AND IS THE FORECAST IN A SET OF FORECASTS
THE PRINCIPLE ASSUMPTIONS FOR THIS RUN ARE RECESSION WITH PRICES(#75) AND GOV. OFFSET(#75)

VARIABLE NAME	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	ANNUALIZED COMPOUND GROWTH RATES,YEARS- 1-5	6-10	1-10
TABLE 2.1 -- GROSS NATIONAL PRODUCT IN CONSTANT DOLLARS														
GROSS NATIONAL PRODUCT	720.1	742.0	787.4	828.1	846.9	889.6	945.8	1001.3	1053.0	1102.7	1147.9	4.64	4.96	4.96
CONSUMPTION EXPENDITURES	496.5	493.9	521.3	545.6	563.6	586.5	623.8	653.5	685.8	716.0	743.4	4.41	4.61	4.64
DURABLE GOODS	92.1	89.5	94.8	98.1	100.7	106.1	116.2	123.9	130.6	136.7	141.2	4.33	4.99	5.19
NONDURABLE GOODS	207.3	213.5	226.5	237.0	244.7	254.3	267.2	278.7	290.4	301.8	312.9	4.47	4.82	4.33
SERVICES	191.1	190.9	200.1	210.5	218.2	226.6	237.4	250.9	264.9	277.5	289.3	4.37	5.06	4.72
GROSS PRIVATE INVESTMENT	109.0	109.0	120.0	124.3	124.0	134.0	147.7	160.0	169.1	176.6	182.1	5.45	5.30	5.06
FIXED INVESTMENT	108.0	106.1	113.3	118.3	121.5	129.2	138.1	149.7	157.5	165.3	171.4	5.05	5.55	5.47
NONRESIDENTIAL	79.2	78.6	84.9	92.4	97.9	105.0	110.1	116.6	124.0	132.4	139.3	7.49	6.06	6.56
STRUCTURES	24.2	23.0	23.7	26.6	28.3	29.6	31.2	33.4	36.1	39.1	41.7	6.47	7.52	6.83
EQUIPMENT	54.6	55.6	61.3	65.0	69.6	75.4	78.9	83.2	87.9	93.3	97.6	7.90	5.47	6.44
RESIDENTIAL STRUCTURES	22.2	27.4	28.4	25.9	23.7	24.2	28.0	32.1	33.5	32.9	32.1	-3.10	3.46	1.75
NONFARM	28.0	27.0	28.0	25.5	23.3	23.0	27.6	31.7	33.1	32.5	31.7	-3.19	3.51	1.70
FARM	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.00	.00	.00
CHANGE IN INVENTORIES	1.3	2.9	7.0	6.0	3.3	5.0	9.5	12.1	11.7	11.3	10.7	17.02	2.04	15.54
NONFARM	2.0	2.2	7.5	6.0	3.3	5.6	9.5	12.1	11.7	11.3	10.7	25.69	2.04	10.90
FARM	.7	.7	.1	.0	.0	.0	.0	.0	.0	.0	.0	******	******	******
NET EXPORTS OF GOODS AND SERV	2.4	1.4	4.9	5.0	5.1	5.4	6.2	6.2	6.2	6.5	7.2	10.91	3.03	19.55
EXPORTS	52.2	54.0	55.3	58.0	60.6	63.5	67.0	72.0	76.3	80.9	85.7	4.29	6.02	5.25
IMPORTS	49.0	52.6	50.4	53.0	55.5	58.5	61.6	65.0	70.1	74.5	78.4	2.72	6.23	4.94
GOVERNMENT PURCHASES	130.5	130.2	140.2	145.2	153.3	142.4	171.2	180.9	191.0	203.2	213.2	4.12	5.00	5.04
FEDERAL	65.4	61.2	58.9	58.0	60.2	61.9	64.1	66.2	69.3	71.9	74.2	.27	3.74	2.17
NATIONAL DEFENSE	50.7	45.5	43.6	42.4	42.7	43.3	44.4	45.3	46.4	47.7	49.1	-1.23	2.54	.64
OTHER	14.7	15.7	15.3	16.4	17.6	18.6	19.7	21.0	22.9	24.2	25.2	4.26	6.30	5.37
STATE AND LOCAL	77.0	77.0	81.3	86.4	93.0	100.5	107.1	114.6	122.4	131.3	140.9	6.00	7.10	6.04
TABLE 2.2 -- IMPLICIT PRICE DEFLATORS FOR GNP														
GROSS NATIONAL PRODUCT	135.3	141.6	146.0	151.9	157.2	161.6	165.0	168.7	172.9	177.6	182.5	3.17	2.55	2.86
CONSUMPTION EXPENDITURES	129.4	134.6	138.1	142.3	147.0	150.2	152.5	155.3	158.6	162.5	166.5	2.78	2.23	2.39
DURABLE GOODS	108.9	113.1	114.2	116.1	118.2	119.5	121.0	122.3	123.9	125.7	127.5	1.48	1.32	1.34
NONDURABLE GOODS	127.7	131.5	134.1	137.5	140.2	141.7	142.6	144.0	145.7	147.5	149.4	1.89	1.17	1.43
SERVICES	148.2	148.2	153.0	161.0	168.0	173.5	179.1	184.1	189.9	196.0	204.1	4.00	3.32	3.62
FIXED INVESTMENT	132.7	140.5	147.0	154.0	160.4	167.3	173.9	179.7	186.0	192.3	198.7	4.45	3.39	3.92
NONRESIDENTIAL	138.3	136.0	142.4	149.2	156.0	163.2	169.4	174.6	180.5	186.0	193.1	4.52	3.33	3.90
STRUCTURES	152.1	147.5	151.1	162.4	204.1	217.2	229.0	240.0	252.6	266.1	280.2	6.71	5.10	5.80
EQUIPMENT	128.1	124.1	127.5	131.7	136.5	142.1	145.0	148.3	150.9	153.4	155.0	3.43	1.60	2.56
RESIDENTIAL	142.4	151.2	160.7	171.3	178.5	184.5	191.4	198.4	206.3	214.6	223.0	5.16	3.80	4.40
NONFARM	142.4	151.3	160.0	171.4	178.6	185.0	191.5	198.5	206.3	214.7	223.0	5.16	3.80	4.40
FARM	138.6	145.2	155.0	163.0	171.0	179.0	185.5	195.0	203.0	211.0	219.0	5.36	4.24	4.66
CHANGE IN INVENTORIES	120.0	105.4	110.1	112.9	116.0	119.3	121.0	122.3	123.7	125.0	126.3	1.23	.93	1.71
EXPORTS	125.2	125.6	130.4	134.3	137.9	140.5	143.3	145.0	148.0	153.3	157.9	2.92	2.46	2.57
IMPORTS	110.0	107.1	110.9	119.0	142.0	145.5	149.0	152.5	156.0	159.6	163.3	3.51	2.31	2.02
GOVERNMENT PURCHASES	157.4	160.3	170.6	180.0	195.0	201.0	207.6	213.1	218.3	223.7	229.4	4.44	2.54	3.58
FEDERAL	140.7	150.2	170.0	181.6	188.2	193.1	196.1	200.1	203.0	205.5	208.0	5.11	1.47	3.00
STATE AND LOCAL	165.0	176.3	166.0	192.4	199.5	207.1	214.4	220.6	227.0	233.0	240.7	4.10	2.94	3.52

THIS FORECAST WAS PREPARED BY CHASE ECONOMETRICS, INC. ON JAN 1971 AND IS THE FORECAST IN A SET OF FORECASTS
THE PRINCIPLE ASSUMPTIONS FOR THIS RUN ARE RECESSION WITH 125 PERCENT PRICES

VARIABLE NAME	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	ANNUALIZED COMPOUND GROWTH RATES, YEARS- 1-5	6-10	1-10
TABLE 1.1 -- GROSS NATIONAL PRODUCT IN CURRENT DOLLARS														
GROSS NATIONAL PRODUCT	974.1	1050.4	1152.0	1270.7	1333.5	1434.9	1553.1	1681.2	1811.9	1944.2	2079.3	8.11	7.57	7.88
CONSUMPTION EXPENDITURES	615.9	664.9	720.0	780.7	831.5	883.7	946.0	1012.9	1084.1	1154.2	1224.6	7.37	6.67	7.01
DURABLE GOODS	104.7	101.3	108.4	114.0	119.3	127.2	140.4	151.3	161.3	170.7	179.9	5.87	6.40	6.59
NONDURABLE GOODS	264.7	288.6	314.2	326.7	343.9	368.6	388.2	408.7	421.9	442.4	463.2	6.47	5.86	5.72
SERVICES	262.5	283.0	308.2	339.9	368.3	395.9	425.5	460.9	500.9	541.1	581.6	8.75	8.13	8.32
GROSS PRIVATE INVESTMENT	136.6	152.3	170.0	191.6	202.0	225.5	252.0	284.3	311.2	335.0	358.5	10.32	9.13	9.97
FIXED INVESTMENT	133.0	149.1	167.0	183.6	197.6	218.6	241.0	267.8	294.2	318.9	342.8	10.03	9.21	9.68
NONRESIDENTIAL	109.3	107.6	122.3	139.0	156.6	176.0	189.5	205.2	224.0	246.9	268.5	13.09	9.10	10.69
STRUCTURES	36.0	38.5	43.0	51.4	58.3	65.1	72.3	80.6	90.8	103.0	115.6	14.02	12.44	12.97
EQUIPMENT	65.3	69.1	79.4	88.3	98.3	110.9	117.2	124.7	134.0	143.9	152.9	12.57	6.87	9.22
RESIDENTIAL STRUCTURES	31.7	41.5	45.5	43.0	41.1	42.6	51.5	62.5	69.4	72.0	74.3	.63	9.62	6.67
NONFARM	31.1	41.0	44.9	43.2	40.4	41.9	50.7	61.7	68.6	71.1	73.5	.56	9.69	6.70
CHANGE IN INVENTORIES	2.0	3.2	10.1	8.0	4.3	6.9	11.0	16.6	17.0	16.1	15.7	21.81	7.41	19.46
NET EXPORTS OF GOODS AND SERV.	3.9	1.0	2.0	3.5	3.4	3.7	5.1	4.9	4.8	6.2	8.4	17.89	13.76	26.17
EXPORTS	62.9	67.9	72.1	78.0	83.5	90.0	97.1	105.0	113.7	124.2	135.3	7.33	8.64	7.96
IMPORTS	59.0	66.0	69.3	74.5	80.1	86.4	92.1	100.1	108.9	118.0	126.9	6.63	8.34	7.38
GOVERNMENT PURCHASES	219.4	232.6	250.3	272.9	296.7	322.1	349.4	378.9	411.5	448.9	487.0	8.68	8.70	8.57
FEDERAL	97.2	96.0	100.1	106.7	113.3	119.5	125.7	132.0	139.4	148.0	157.1	5.39	5.73	5.52
NATIONAL DEFENSE	75.3	72.0	74.0	76.9	80.3	83.6	87.1	90.5	94.3	98.1	102.1	3.02	4.05	3.95
OTHER	21.9	24.0	26.0	29.0	33.0	35.0	38.6	41.4	45.1	49.9	55.0	9.59	9.23	9.22
STATE AND LOCAL	122.2	135.7	150.2	166.2	183.4	202.6	223.6	246.9	272.1	300.9	330.7	10.53	10.27	10.39
TABLE 1.2 -- OTHER MAJOR ECONOMIC INDICATORS														
MONEY SUPPLY WITHOUT TIME DEP	212.5	224.4	239.5	256.1	274.3	297.2	321.7	347.2	372.5	396.6	419.1	7.28	6.83	7.18
MONEY SUPPLY WITH TIME DEPOSIT	428.6	478.1	526.0	571.0	628.7	679.1	741.6	812.2	884.4	958.4	1033.0	9.17	8.64	8.93
TREASURY BILL RATE, 91-DAY	6.44	4.34	4.65	5.32	5.00	4.72	4.39	4.10	3.80	3.90	3.91	2.11	-2.84	-1.14
CORPORATE BOND RATE, NEW ISSUE	9.05	7.90	7.94	7.77	7.46	7.22	7.12	6.84	6.50	6.21	6.00	-2.24	-4.19	-3.00
INDEX OF INDUS PROD, TOTAL	106.5	106.7	114.6	118.7	121.7	127.7	137.4	146.3	154.2	161.0	169.4	4.59	5.39	5.27
INDEX OF INDUS PROD, MFG.	105.1	104.9	113.3	116.2	117.1	122.4	131.9	140.9	148.9	156.5	164.2	3.92	5.62	5.09
INDEX OF INDUS PROD, STEEL	106.0	95.9	99.7	109.6	105.6	109.5	125.7	146.2	159.4	167.3	174.6	3.37	8.56	6.07
INDEX OF CAPACITY UTILIZATION	82.7	81.0	86.0	85.6	84.1	85.5	88.3	90.5	91.3	91.5	91.7	1.12	.95	1.20
NEW PASSENGER CAR SALES,SAAR	8.44	10.33	11.24	11.16	10.60	10.81	11.81	12.60	13.10	13.54	13.90	1.15	4.16	3.35
TOTAL PRIVATE HOUSING STARTS	1.46	2.00	2.00	1.79	1.63	1.73	2.00	2.43	2.60	2.60	2.61	-3.59	5.86	2.99
GNP IN 1958 DOLLARS	720.0	742.0	780.4	820.1	844.4	880.7	930.9	985.5	1037.5	1086.5	1134.9	4.30	5.00	4.83
IMPLICIT GNP DEFLATOR	135.3	141.6	146.1	152.2	157.9	162.9	166.0	170.6	174.6	178.9	183.2	3.58	2.37	2.90
CONSUMER PRICE INDEX	116.3	121.2	125.1	130.7	136.0	140.1	142.9	146.0	149.5	153.2	156.0	3.70	2.35	2.90
WHSL PRICE INDEX (INDUS COMM)	110.0	114.0	116.4	118.7	121.4	124.6	126.2	127.2	128.2	129.0	129.7	2.24	.68	1.44
PCT CHANGE IN GNP$ (ANN RATE)	6.70	7.83	9.67	8.40	6.79	7.60	8.24	8.25	7.77	7.30	6.95	-.73	-4.16	-1.31
PCT CHANGE IN GNP58 (ANN RATE)	3.84	3.05	6.25	4.82	2.96	4.29	5.71	5.86	5.27	4.72	4.45	0.07	-6.01	4.20
PCT CHANGE IN GNP DEFLATOR	2.94	4.62	3.21	4.21	3.71	3.10	2.39	2.26	2.30	2.47	2.39	-0.95	.01	-7.06
PCT CHANGE IN CONS PRICE INDEX	4.30	4.19	3.22	4.51	4.06	3.01	1.97	2.16	2.40	2.46	2.30	-7.09	4.07	-4.09
DISPOSABLE PERSONAL INCOME	687.7	743.3	805.0	866.9	924.9	983.5	1053.5	1124.1	1200.3	1274.0	1352.1	7.25	6.44	6.87
CORP PROFITS WITHOUT IVA ADJ.	75.3	81.7	97.1	103.0	111.5	124.0	136.0	146.6	158.5	170.4	181.2	10.90	7.44	9.24
UNEMPLOYMENT RATE	5.0	5.9	5.4	5.0	6.3	6.2	5.7	5.7	5.7	5.6	5.6	1.25	-.67	-.67
PERSONAL SAVINGS RATE	7.0	8.0	7.9	7.4	7.5	7.5	7.6	7.2	7.0	6.7	6.7	-1.43	-3.24	-2.01
FEDERAL GOVT SURPLUS OR DEF	-13.7	-21.4	-18.4	-20.0	-25.0	-17.2	-14.0	-1.0	-1.5	2.9	7.2	******	******	******

THIS FORECAST WAS PREPARED BY CHASE ECONOMETRICS, INC. ON JAN 1971 AND IS THE FORECAST IN A SET OF FORECASTS
THE PRINCIPLE ASSUMPTIONS FOR THIS RUN ARE RECESSION WITH 125 PERCENT PRICES

VARIABLE NAME	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	ANNUALIZED COMPOUND GROWTH RATES,YEARS- 1-5	6-10	1-10
TABLE 2.1 -- GROSS NATIONAL PRODUCT IN CONSTANT DOLLARS														
GROSS NATIONAL PRODUCT	720.0	742.8	788.4	828.1	844.4	888.7	938.9	985.5	1037.5	1086.5	1134.9	4.38	5.08	4.83
CONSUMPTION EXPENDITURES	496.5	493.9	521.7	545.6	563.3	584.5	615.4	647.3	679.1	708.1	736.2	4.38	4.58	4.53
DURABLE GOODS	92.2	89.5	94.9	97.9	100.4	105.2	114.9	122.7	129.1	135.0	140.6	4.11	5.17	5.14
NONDURABLE GOODS	207.3	213.5	226.5	236.9	244.4	253.0	264.8	276.3	287.9	298.7	309.7	4.34	3.99	4.22
SERVICES	191.3	190.9	200.2	210.8	218.5	226.3	235.7	248.3	262.1	274.4	285.9	4.34	4.95	4.58
GROSS PRIVATE INVESTMENT	109.0	109.0	121.9	124.9	125.5	133.6	143.8	157.0	166.4	173.7	180.5	5.23	5.84	5.76
FIXED INVESTMENT	100.9	106.1	114.2	118.9	122.4	128.7	135.7	145.6	154.8	162.7	170.8	4.95	5.88	5.37
NONRESIDENTIAL	79.2	78.6	85.9	93.4	99.5	105.9	109.1	114.5	121.5	129.4	136.6	7.73	5.78	6.32
STRUCTURES	24.2	23.0	23.7	26.6	28.2	29.3	30.7	32.6	35.0	37.0	40.5	6.28	7.13	6.68
EQUIPMENT	54.4	55.6	62.2	66.8	71.3	76.6	78.4	81.8	86.5	91.5	96.1	8.31	5.23	6.26
RESIDENTIAL STRUCTURES	22.2	27.4	28.3	25.5	22.9	22.8	26.6	31.1	33.4	33.4	33.4	-4.53	5.87	2.19
NONFARM	21.8	27.0	27.9	25.1	22.5	22.4	26.2	30.7	33.0	33.0	33.0	-4.68	5.96	2.22
FARM	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.00	.00	.00
CHANGE IN INVENTORIES	1.3	2.9	7.8	6.0	3.1	4.9	8.2	11.4	11.6	10.9	10.5	13.98	6.53	15.37
NONFARM	2.0	2.2	7.7	6.0	3.1	4.9	8.2	11.4	11.6	10.9	10.5	21.68	6.53	18.73
FARM	.7	.7	.1	.0	.0	.0	.0	.0	.0	.0	.0	******	******	******
NET EXPORTS OF GOODS AND SERV	2.4	1.4	4.6	4.6	4.3	4.3	5.5	5.8	6.0	6.7	7.0	31.64	9.15	20.59
EXPORTS	52.2	54.0	55.3	58.0	60.4	63.5	67.3	71.4	75.8	80.6	85.5	4.13	6.10	5.23
IMPORTS	49.8	52.6	50.6	53.3	56.1	59.2	61.8	65.6	69.8	73.9	77.7	3.00	5.91	4.44
GOVERNMENT PURCHASES	139.5	138.2	140.1	144.9	151.4	158.3	166.2	175.3	185.0	198.0	210.4	3.45	6.06	4.77
FEDERAL	65.4	61.2	58.9	58.7	60.0	61.5	63.5	65.3	68.0	71.3	74.9	.11	4.19	2.26
NATIONAL DEFENSE	50.7	45.5	43.6	42.3	42.5	43.0	44.0	44.8	46.0	47.3	48.6	-1.38	2.54	.74
OTHER	14.7	15.7	15.3	16.4	17.5	18.4	19.5	20.5	22.0	24.0	26.2	4.10	7.64	5.85
STATE AND LOCAL	77.0	77.0	81.2	86.2	91.4	96.8	102.7	110.0	117.0	126.7	135.5	5.89	7.17	6.48
TABLE 2.2 -- IMPLICIT PRICE DEFLATORS FOR GNP														
GROSS NATIONAL PRODUCT	135.3	141.6	146.1	152.2	157.9	162.9	166.8	170.6	174.6	178.9	183.2	3.58	2.37	2.98
CONSUMPTION EXPENDITURES	129.4	134.6	138.2	143.1	147.6	151.2	153.7	156.5	159.6	163.0	166.3	2.95	1.99	2.38
DURABLE GOODS	108.0	113.1	114.2	116.4	118.8	120.9	122.1	123.4	124.9	126.5	127.9	1.69	1.17	1.38
NONDURABLE GOODS	127.7	131.5	134.3	137.9	140.7	142.5	143.6	145.0	146.5	148.1	149.5	2.84	1.03	1.44
SERVICES	148.2	148.2	153.9	161.3	168.6	175.0	180.5	185.6	191.1	197.2	203.4	4.23	3.03	3.58
FIXED INVESTMENT	132.7	140.5	147.0	154.4	161.5	169.0	177.6	183.8	190.0	195.9	201.7	4.84	3.23	4.09
NONRESIDENTIAL	130.0	136.0	142.4	149.6	157.3	166.1	173.7	179.2	185.0	190.9	196.6	4.99	3.14	4.11
STRUCTURES	152.1	167.5	181.4	193.4	206.6	221.7	235.1	246.7	259.1	272.2	285.4	7.26	4.96	6.09
EQUIPMENT	120.1	124.1	127.5	132.2	137.8	144.0	149.6	152.3	155.0	157.2	159.1	3.93	1.56	2.79
RESIDENTIAL	142.4	151.2	160.9	171.0	179.6	186.7	193.7	200.7	208.1	215.5	222.0	5.42	3.56	4.39
NONFARM	142.4	151.3	161.0	172.0	179.7	186.9	193.0	200.0	208.1	215.6	222.0	5.42	3.54	4.39
FARM	138.6	145.2	155.0	163.0	171.0	179.0	185.5	195.0	203.0	211.0	219.0	5.36	4.24	4.66
CHANGE IN INVENTORIES	120.0	125.4	130.3	133.4	137.2	141.6	143.0	145.1	146.5	147.6	148.6	7.66	.83	3.89
EXPORTS	125.2	125.6	130.4	134.5	138.3	141.7	144.3	146.9	149.9	154.0	158.2	3.07	2.31	2.59
IMPORTS	118.6	127.1	136.9	139.8	142.8	145.5	149.0	152.5	155.9	159.6	163.2	3.51	2.30	2.81
GOVERNMENT PURCHASES	157.4	168.3	178.7	188.4	195.9	203.5	210.1	216.1	221.5	226.7	231.9	4.86	2.49	3.62
FEDERAL	148.7	158.2	170.1	181.8	188.8	194.3	197.9	202.1	205.1	207.5	209.8	5.27	1.68	3.18
STATE AND LOCAL	165.0	176.3	184.9	192.8	200.6	209.3	217.7	224.4	230.9	237.5	244.0	4.38	2.98	3.67

THIS FORECAST WAS PREPARED BY CHASE ECONOMETRICS, INC. ON JAN 1971 AND IS THE FORECAST IN A SET OF FORECASTS
THE PRINCIPLE ASSUMPTIONS FOR THIS RUN ARE RECESSION WITH PRICES(125) AND GOV. OFFSET(125)

VARIABLE NAME	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	ANNUALIZED COMPOUND GROWTH RATES, YEARS- 1-5	6-10	1-10
TABLE 1.1 -- GROSS NATIONAL PRODUCT IN CURRENT DOLLARS														
GROSS NATIONAL PRODUCT	974.1	1058.4	1152.1	1248.7	1338.3	1455.1	1585.6	1716.5	1856.8	1998.6	2150.8	8.49	7.91	8.20
CONSUMPTION EXPENDITURES	615.9	664.9	723.8	788.7	832.2	898.5	962.8	1033.3	1109.1	1187.4	1268.8	7.58	7.15	7.43
DURABLE GOODS	104.7	101.3	108.4	114.8	110.6	120.1	143.5	154.7	165.6	176.8	186.1	6.26	6.72	6.89
NONDURABLE GOODS	264.7	288.6	304.2	326.7	344.2	363.4	386.1	407.8	429.3	452.5	476.1	6.67	5.38	6.04
SERVICES	262.5	283.1	308.2	339.9	368.4	398.1	432.5	471.6	514.1	558.9	605.8	8.98	8.79	8.87
GROSS PRIVATE INVESTMENT	136.6	152.3	178.8	191.6	202.4	229.5	266.9	298.8	316.7	342.8	367.8	18.84	8.91	18.26
FIXED INVESTMENT	133.8	149.1	167.8	183.6	198.1	221.8	246.5	273.3	308.2	325.6	351.2	18.44	9.25	9.97
NONRESIDENTIAL	109.3	117.6	122.3	139.8	156.8	178.3	194.1	218.6	232.2	257.1	288.4	13.66	9.64	11.22
STRUCTURES	36.8	38.5	43.8	51.4	58.3	65.4	73.2	82.4	94.8	107.5	120.9	14.16	13.34	13.54
EQUIPMENT	65.3	69.1	79.4	88.3	98.5	112.9	120.8	128.2	138.2	149.5	159.5	13.87	7.28	9.74
RESIDENTIAL STRUCTURES	31.7	41.5	45.5	43.8	41.3	43.5	52.4	62.7	69.8	68.5	78.8	1.17	7.79	4.89
NONFARM	31.1	41.8	44.9	43.2	40.6	42.8	51.7	61.9	67.2	67.7	69.9	1.11	7.84	5.11
CHANGE IN INVENTORIES	2.8	3.2	10.1	8.8	4.3	8.1	14.4	17.5	16.6	16.4	15.9	26.41	2.53	19.43
NET EXPORTS OF GOODS AND SERV	3.9	1.8	2.8	3.5	3.3	3.1	3.5	2.7	2.5	3.4	5.4	32.88	11.38	20.84
EXPORTS	62.9	67.9	72.1	78.4	83.5	94.1	97.2	105.8	113.8	124.3	135.7	7.33	8.78	7.99
IMPORTS	59.1	66.8	69.3	74.5	80.2	86.5	93.7	103.3	111.3	120.9	130.3	6.79	8.68	7.69
GOVERNMENT PURCHASES	219.4	232.6	258.3	272.9	308.5	331.4	359.4	389.9	427.5	465.8	509.6	9.26	9.12	9.18
FEDERAL	97.2	96.8	108.1	106.7	113.3	119.5	125.7	132.9	145.7	154.8	164.5	5.19	6.95	5.86
NATIONAL DEFENSE	75.3	72.8	74.3	76.9	88.3	93.6	97.1	98.5	94.3	98.1	102.1	3.82	4.85	3.95
OTHER	21.9	24.0	26.9	29.8	33.8	35.8	38.6	42.4	51.4	56.7	62.4	9.59	12.73	10.77
STATE AND LOCAL	122.2	135.7	150.2	166.2	187.1	211.9	233.6	256.9	281.8	310.9	345.1	11.78	10.24	10.91

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TABLE 1.2 -- OTHER MAJOR ECONOMIC INDICATORS														
MONEY SUPPLY WITHOUT TIME DEP	212.5	224.4	239.5	256.1	274.7	299.8	327.3	356.4	386.8	414.5	441.5	7.51	7.77	7.88
MONEY SUPPLY WITH TIME DEPOSIT	422.4	478.1	526.8	571.8	622.8	688.1	758.1	834.6	915.3	994.3	1074.3	9.53	9.11	9.48
TREASURY BILL RATE, 91-DAY	6.46	4.34	4.65	5.32	6.79	6.27	4.32	3.78	3.63	3.91	3.97	-.39	-.26	-.96
CORPORATE BOND RATE, NEW ISSUE	9.26	7.98	7.94	7.77	7.77	6.98	6.83	6.67	6.89	6.93	6.82	-3.84	-3.89	-3.33
INDEX OF INDUS PROD, TOTAL	126.5	126.7	114.6	118.7	121.9	129.1	139.3	148.1	155.6	163.4	170.6	6.88	5.87	5.35
INDEX OF INDUS PROD, MFG.	125.1	124.9	113.3	116.2	117.3	123.5	134.6	142.8	150.6	158.2	165.5	6.24	5.29	5.19
INDEX OF INDUS PROD, STEEL	126.8	95.9	99.7	108.6	105.9	112.7	131.6	149.8	158.9	164.6	170.5	6.18	6.78	6.59
INDEX OF CAPACITY UTILIZATION	82.7	81.8	86.8	85.6	86.2	86.4	89.5	91.2	92.1	92.4	92.3	1.38	.76	1.35
NEW PASSENGER CAR SALES,SAAR	8.44	10.33	11.24	11.18	10.71	11.17	12.11	13.88	13.48	13.86	14.14	1.75	3.98	3.55
TOTAL PRIVATE HOUSING STARTS	1.46	2.28	2.32	1.79	1.65	1.77	2.39	2.39	2.49	2.41	2.42	-3.89	3.69	2.11
GNP IN 1958 DOLLARS	720.8	742.4	788.4	828.1	847.8	891.9	944.4	1008.5	1051.8	1108.8	1148.3	4.71	4.98	4.97
IMPLICIT GNP DEFLATOR	135.3	141.6	146.1	152.2	158.1	163.1	167.9	171.5	176.4	181.7	187.2	3.61	2.87	3.15
CONSUMER PRICE INDEX	116.3	121.2	125.1	130.7	136.8	140.1	143.2	147.8	151.3	156.1	161.2	3.78	3.88	3.21
WHSL PRICE INDEX (INDUS COMM)	113.1	114.8	116.4	118.7	121.5	124.6	126.3	127.5	128.9	130.2	131.4	2.25	.99	1.58
PCT CHANGE IN GNPE (ANN RATE)	6.78	7.83	9.67	8.43	7.18	8.77	8.98	8.25	8.13	7.69	7.57	7.72	-4.17	-.47
PCT CHANGE IN GNPCA (ANN RATE)	3.44	3.55	6.26	4.32	3.28	5.31	6.32	5.58	5.12	4.58	4.39	14.81	-8.71	4.12
PCT CHANGE IN GNP DEFLATOR	2.96	4.62	3.21	4.21	3.77	3.24	2.59	2.61	2.86	2.97	3.04	-8.51	5.88	-4.53
PCT CHANGE IN CONS PRICE INDEX	4.39	4.15	3.22	4.51	4.65	3.41	2.28	2.64	2.37	3.17	3.21	-7.91	9.97	-2.98
DISPOSABLE PERSONAL INCOME	687.7	743.3	805.8	866.9	926.3	994.1	1072.4	1164.2	1264.4	1378.1	1498.1	7.54	6.86	7.24
CORP PROFITS WITHOUT IVA ADJ.	75.3	81.7	97.1	103.3	113.2	137.3	148.8	151.1	163.8	178.9	189.8	11.66	7.65	9.78
UNEMPLOYMENT RATE	5.3	5.4	5.4	5.8	6.2	6.8	5.5	5.4	5.4	5.3	5.3	.38	-.84	-1.21
PERSONAL SAVINGS RATE	7.8	8.1	7.9	7.4	7.6	7.3	7.7	7.1	6.9	6.7	6.6	-.51	-3.91	-2.13
FEDERAL GOVT SURPLUS OR DEF	-13.7	-21.4	-19.4	-22.4	-26.4	-21.4	-23.6	-5.8	-7.4	-1.4	2.1	*******	*******	*******

THIS FORECAST WAS PREPARED BY CHASE ECONOMETRICS, INC. ON JAN 1971 AND IS THE FORECAST IN A SET OF FORECASTS
THE PRINCIPLE ASSUMPTIONS FOR THIS RUN ARE RECESSION WITH PRICES(125) AND GOV. OFFSET(125)

VARIABLE NAME	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	ANNUALIZED COMPOUND GROWTH RATES,YEARS- 1-5	6-10	1-10
TABLE 1.1 -- GROSS NATIONAL PRODUCT IN CURRENT DOLLARS														
GROSS NATIONAL PRODUCT	974.1	1053.4	1152.1	1264.7	1388.3	1455.1	1585.6	1714.5	1856.8	1998.6	2150.8	8.49	7.91	8.20
CONSUMPTION EXPENDITURES	615.9	666.9	729.8	798.7	832.2	898.5	962.8	1033.3	1109.1	1187.4	1268.8	7.58	7.15	7.43
DURABLE GOODS	104.7	101.3	108.4	114.8	110.6	120.1	143.5	154.7	165.6	176.8	186.1	6.26	6.72	6.89
NONDURABLE GOODS	266.7	288.6	306.2	326.7	344.2	363.4	386.1	407.8	429.3	452.5	476.1	6.67	5.78	6.84
SERVICES	262.5	289.1	314.3	339.9	363.4	398.1	432.5	471.6	514.1	558.9	605.8	8.98	8.79	8.87
GROSS PRIVATE INVESTMENT	136.6	152.3	174.8	191.6	202.4	229.5	264.9	298.8	314.7	342.8	367.8	10.84	8.91	10.26
FIXED INVESTMENT	133.8	149.1	167.8	183.6	198.1	221.8	246.5	273.3	308.2	325.6	351.2	10.44	9.25	9.97
NONRESIDENTIAL	104.3	107.6	122.3	139.4	154.8	170.3	194.1	218.6	232.2	257.1	288.6	13.48	9.44	11.22
STRUCTURES	36.8	38.5	43.8	51.4	58.3	65.4	73.2	82.4	94.8	107.5	120.9	14.16	13.34	13.54
EQUIPMENT	65.3	69.1	78.4	88.3	96.5	112.5	120.8	136.2	137.4	149.5	159.5	13.87	7.28	9.74
RESIDENTIAL STRUCTURES	31.7	41.5	45.5	43.8	41.3	43.5	52.4	62.7	69.8	68.5	78.8	1.17	7.79	4.89
NONFARM	31.1	41.8	44.9	43.2	40.6	42.8	51.7	61.9	67.2	67.7	69.9	1.11	7.84	4.11
CHANGE IN INVENTORIES	2.8	3.2	10.1	8.8	4.3	8.1	14.4	17.5	16.6	16.4	15.9	26.41	2.53	19.43
NET EXPORTS OF GOODS AND SERV	3.9	1.8	2.8	3.5	3.3	3.1	3.5	2.7	2.5	3.4	5.4	32.88	11.38	28.84
EXPORTS	62.9	67.9	72.1	78.3	83.5	94.1	97.2	105.8	113.8	124.1	135.7	7.77	8.78	7.99
IMPORTS	59.1	66.1	69.3	74.5	80.2	86.5	93.7	103.3	111.3	120.9	130.3	6.79	8.68	7.69
GOVERNMENT PURCHASES	219.4	232.6	250.3	272.9	300.5	331.4	359.4	389.9	427.5	465.8	509.6	9.26	9.12	9.18
FEDERAL	97.3	96.8	108.1	116.7	113.1	119.5	125.7	132.9	145.7	154.8	166.5	5.39	6.95	6.86
NATIONAL DEFENSE	75.3	72.8	74.9	76.9	84.3	83.6	87.1	88.5	94.3	98.1	102.1	3.82	4.85	3.95
OTHER	21.9	24.1	26.3	29.4	33.2	35.8	38.6	42.4	51.4	56.7	62.4	9.59	12.73	10.77
STATE AND LOCAL	122.2	135.7	150.2	166.2	187.1	211.9	233.6	256.9	281.8	310.9	345.1	11.78	10.24	10.91

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TABLE 1.2 -- OTHER MAJOR ECONOMIC INDICATORS														
MONEY SUPPLY WITHOUT TIME DEP	212.5	224.4	239.5	256.1	274.7	299.8	327.3	354.4	386.8	414.5	441.5	7.51	7.77	7.88
MONEY SUPPLY WITH TIME DEPOSIT	423.4	473.1	526.8	571.3	623.8	688.1	758.1	834.6	915.3	994.3	1074.7	9.51	9.11	9.48
TREASURY BILL RATE, 91-DAY	6.46	4.34	4.45	5.32	6.74	6.27	6.02	5.74	5.61	5.91	5.97	-1.19	-.26	-.96
CORPORATE BOND RATE, NEW ISSUE	9.06	7.08	7.04	7.77	7.77	6.98	6.89	6.67	6.89	6.93	6.82	-3.84	-3.89	-3.33
INDEX OF INDUS PROD, TOTAL	136.5	136.7	114.6	118.7	121.9	130.1	139.3	148.1	155.6	163.6	178.6	4.88	5.87	5.35
INDEX OF INDUS PROD, MFG.	135.1	136.9	113.3	116.2	117.3	123.5	134.6	142.9	150.4	158.2	165.5	4.24	5.29	5.19
INDEX OF INDUS PROD, STEEL	126.8	85.9	99.7	108.4	105.9	112.7	131.6	149.8	158.9	164.6	178.5	4.18	6.78	6.59
INDEX OF CAPACITY UTILIZATION	82.7	81.8	86.8	85.6	84.2	86.4	89.5	91.2	92.1	92.4	92.7	1.38	.76	1.15
NEW PASSENGER CAR SALES,SAAR	8.66	10.33	11.24	11.14	10.71	11.17	12.13	12.88	13.48	13.86	14.14	1.75	3.98	3.55
TOTAL PRIVATE HOUSING STARTS	1.46	2.32	2.32	1.79	1.65	1.77	2.39	2.39	2.49	2.41	2.42	-1.49	3.49	2.11
GNP IN 1958 DOLLARS	728.9	742.3	788.4	828.1	847.8	881.9	948.4	1008.5	1051.8	1108.8	1148.3	4.71	4.98	4.97
IMPLICIT GNP DEFLATOR	135.3	141.8	146.1	152.3	158.9	163.1	167.2	171.5	176.4	181.7	187.2	3.61	2.87	3.15
CONSUMER PRICE INDEX	114.7	121.2	125.1	130.7	136.8	140.1	143.2	147.8	151.3	156.1	161.2	3.78	3.88	3.21
WHSL PRICE INDEX (INDUS COMM)	113.9	114.3	116.4	118.7	121.5	124.8	126.3	127.5	128.9	130.2	131.4	2.35	.99	1.58
PCT CHANGE IN GNPE (ANN RATE)	6.78	7.23	8.67	8.41	7.18	8.72	8.98	8.35	8.13	7.59	7.57	7.72	-8.17	-.37
PCT CHANGE IN GNPSA (ANN RATE)	3.44	3.15	6.25	6.32	3.28	5.31	6.32	6.58	5.12	4.58	4.39	14.81	-8.71	4.12
PCT CHANGE IN GNP DEFLATOR	2.94	4.62	3.21	4.21	3.77	3.24	2.59	2.61	2.86	2.97	3.04	-8.51	5.88	-4.53
PCT CHANGE IN CONS PRICE INDEX	4.33	4.16	3.22	4.51	4.65	3.41	2.28	2.64	2.97	3.17	3.21	-7.91	9.97	-2.98
DISPOSABLE PERSONAL INCOME	687.7	743.3	795.8	866.3	926.3	994.1	1072.4	1144.2	1224.4	1318.1	1398.1	7.54	6.86	7.26
CORP PROFITS WITHOUT IVA ADJ.	75.3	81.7	97.1	103.4	113.4	127.3	148.8	151.1	163.8	176.9	189.8	11.66	7.65	9.75
UNEMPLOYMENT RATE	5.9	5.4	5.4	5.4	6.2	6.8	5.5	5.4	5.4	5.3	5.3	.38	-.84	-1.21
PERSONAL SAVINGS RATE	7.4	8.1	7.9	7.4	7.4	7.2	7.7	7.1	6.9	6.7	6.6	-.51	-3.91	-2.13
FEDERAL GOVT SURPLUS OR DEF	-13.7	-21.4	-19.4	-22.4	-26.4	-21.4	-23.6	-5.8	-7.4	-1.4	2.1	******	******	******

THIS FORECAST WAS PREPARED BY CHASE ECONOMETRICS, INC. ON JAN 1971 AND IS THE FORECAST IN A SET OF FORECASTS
THE PRINCIPLE ASSUMPTIONS FOR THIS RUN ARE RECESSION WITH PRICES(13S) AND GOV. OFFSET(12S)

VARIABLE NAME	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	ANNUALIZED COMPOUND GROWTH RATES, YEARS- 1-5	6-10	1-10
TABLE 2.1 -- GROSS NATIONAL PRODUCT IN CONSTANT DOLLARS														
GROSS NATIONAL PRODUCT	724.4	742.1	782.4	824.1	847.1	831.5	948.4	1004.5	1051.8	1108.8	1148.1	4.71	4.98	4.97
CONSUMPTION EXPENDITURES	496.5	493.9	521.7	545.6	563.7	599.1	624.9	656.8	688.1	717.5	745.9	4.58	4.53	4.68
DURABLE GOODS	92.1	90.5	94.9	97.9	108.4	106.7	117.2	124.8	131.5	137.5	143.1	4.69	5.11	5.16
NONDURABLE GOODS	217.3	213.5	224.5	238.9	244.6	254.9	268.5	279.5	291.8	302.2	313.5	4.54	3.95	4.36
SERVICES	191.1	192.4	202.3	218.8	213.5	237.4	239.8	252.5	265.7	277.8	289.3	4.47	4.89	4.72
GROSS PRIVATE INVESTMENT	139.9	139.4	121.9	134.9	125.4	136.7	148.5	159.8	167.4	174.3	188.4	5.74	4.99	5.76
FIXED INVESTMENT	133.9	136.1	114.2	118.9	122.6	131.5	138.5	147.8	156.1	163.3	169.9	5.32	5.24	5.37
NONRESIDENTIAL	79.3	78.6	85.9	93.4	98.6	107.3	111.7	116.9	124.8	132.3	139.2	8.88	5.87	6.55
STRUCTURES	24.3	23.4	23.7	26.6	28.2	29.5	31.8	33.2	35.8	38.7	41.2	6.17	7.35	6.69
EQUIPMENT	54.4	55.4	63.3	66.8	71.4	77.8	80.6	83.8	88.2	93.6	98.8	8.76	5.88	6.69
RESIDENTIAL STRUCTURES	33.3	37.4	38.3	35.5	31.8	33.2	36.9	38.9	32.1	31.8	38.7	-4.87	3.39	1.25
NONFARM	28.1	32.3	32.9	29.1	25.4	25.8	28.5	30.5	31.7	30.6	30.1	-4.13	3.44	1.27
FARM	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.88	.88	.88
CHANGE IN INVENTORIES	1.1	3.8	7.8	6.8	3.2	5.7	10.8	12.8	11.2	11.8	18.5	18.27	1.33	15.34
NONFARM	3.1	3.3	7.7	6.8	3.2	5.7	14.8	12.8	11.2	11.8	18.5	26.18	1.33	18.78
FARM	.7	.7	.1	.8	.8	.8	.8	.8	.8	.8	.8	******	******	******
NET EXPORTS OF GOODS AND SERV	3.4	1.4	.6	4.4	6.2	4.8	4.4	4.2	4.8	4.1	4.7	38.91	1.33	13.98
EXPORTS	52.3	54.8	55.3	58.8	58.4	63.5	67.3	71.2	75.4	79.9	84.4	4.14	5.85	5.88
IMPORTS	48.9	52.6	54.6	53.3	56.1	58.8	62.8	67.1	71.3	75.7	79.8	3.18	6.15	4.74
GOVERNMENT PURCHASES	138.8	138.3	149.1	144.9	153.7	162.7	173.7	179.9	192.2	204.8	217.1	4.17	6.21	5.14
FEDERAL	60.4	61.2	68.9	58.7	68.1	61.5	63.5	65.7	74.8	74.3	77.9	.11	5.23	2.71
NATIONAL DEFENSE	51.7	45.5	43.6	42.1	43.5	43.8	44.8	44.7	45.8	47.1	48.3	-1.38	2.38	.47
OTHER	14.7	15.7	15.3	16.6	17.5	18.4	19.5	20.9	25.8	27.2	29.5	4.89	18.92	7.26
STATE AND LOCAL	77.1	77.2	81.2	86.3	93.1	101.2	107.2	114.2	121.4	129.7	139.5	7.88	6.88	6.82
TABLE 2.2 -- IMPLICIT PRICE DEFLATORS FOR GNP														
GROSS NATIONAL PRODUCT	135.3	141.6	146.1	152.9	158.8	169.1	167.2	171.5	176.4	181.7	187.2	3.81	2.87	3.19
CONSUMPTION EXPENDITURES	130.6	134.6	138.5	143.1	147.6	151.2	154.8	157.3	161.2	165.5	170.8	2.96	2.51	2.82
DURABLE GOODS	118.9	113.1	114.2	115.4	118.3	121.1	122.4	124.8	125.9	128.8	130.8	1.78	1.53	1.56
NONDURABLE GOODS	137.7	141.5	144.3	147.3	149.7	149.5	149.8	149.6	147.8	149.7	151.9	2.46	1.38	1.81
SERVICES	141.3	142.2	149.9	161.3	168.6	175.3	188.9	194.7	193.4	201.2	209.4	6.24	3.72	3.91
FIXED INVESTMENT	132.7	141.5	147.2	154.6	161.5	169.9	177.9	184.9	192.2	199.1	206.6	6.85	3.82	4.37
NONRESIDENTIAL	138.1	144.8	149.6	159.6	157.1	166.1	173.8	180.1	187.1	194.2	201.6	6.98	3.76	4.39
STRUCTURES	152.1	167.5	181.6	193.6	204.6	222.1	235.9	248.5	262.6	277.6	293.1	7.18	5.58	6.41
EQUIPMENT	128.1	134.1	137.6	137.3	137.8	145.3	148.9	153.1	158.8	159.7	162.8	3.98	2.89	3.84
RESIDENTIAL	142.4	151.2	161.9	171.8	179.6	187.1	194.9	202.9	211.7	221.8	230.4	5.47	4.28	4.79
NONFARM	142.4	151.3	161.8	172.8	179.2	187.7	195.8	203.8	211.8	221.2	230.6	5.48	4.28	4.79
FARM	134.6	145.2	155.1	163.8	171.8	179.3	185.5	195.8	203.8	211.8	219.8	5.16	4.24	4.66
CHANGE IN INVENTORIES	139.1	135.4	133.1	133.4	137.3	141.8	143.9	145.5	147.5	149.1	150.9	7.87	1.19	4.87
EXPORTS	125.3	125.6	131.4	134.5	138.3	141.7	144.4	147.4	151.9	155.7	158.6	3.84	2.69	2.77
IMPORTS	119.4	127.1	134.9	139.4	142.2	145.9	149.1	152.6	156.8	159.6	163.3	3.51	2.31	2.82
GOVERNMENT PURCHASES	157.4	168.3	178.7	188.4	194.1	203.7	218.5	214.7	222.4	228.3	234.4	6.88	2.73	3.75
FEDERAL	148.7	158.2	177.1	181.8	188.2	194.6	198.8	202.4	205.7	208.5	211.1	5.27	1.66	3.24
STATE AND LOCAL	165.1	176.1	184.9	192.4	201.4	209.4	217.9	225.8	232.2	239.7	247.4	6.38	3.22	3.83

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THIS FORECAST WAS PREPARED BY CHASE ECONOMETRICS, INC. ON JAN 1971 AND IS THE FORECAST IN A SET OF FORECASTS
THE PRINCIPLE ASSUMPTIONS FOR THIS RUN ARE RECESSION WITH 15% PERCENT PRICES

VARIABLE NAME	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	ANNUALIZED COMPOUND GROWTH RATES, YEARS- 1-5	6-10	1-10
TABLE 1.1 -- GROSS NATIONAL PRODUCT IN CURRENT DOLLARS														
GROSS NATIONAL PRODUCT	974.1	1458.4	1153.4	1258.2	1336.1	1438.5	1556.5	1684.6	1815.6	1947.7	2081.5	8.19	7.54	7.89
CONSUMPTION EXPENDITURES	615.9	664.9	721.3	781.6	833.2	896.2	968.5	1015.8	1085.7	1155.1	1224.4	7.44	6.59	7.01
DURABLE GOODS	104.7	101.3	108.5	114.8	119.5	127.5	140.7	151.8	161.9	171.3	180.3	5.93	6.38	6.41
NONDURABLE GOODS	244.7	258.6	280.6	307.1	344.5	361.4	381.8	401.4	422.6	442.8	463.2	6.53	5.81	5.72
SERVICES	262.5	283.8	308.4	340.5	369.3	397.2	426.7	461.8	501.4	541.1	581.4	8.85	8.82	8.31
GROSS PRIVATE INVESTMENT	136.6	152.3	174.7	192.4	203.3	227.3	254.2	285.9	313.5	337.5	368.8	10.53	9.15	10.85
FIXED INVESTMENT	133.8	149.1	168.5	184.4	199.1	228.5	242.8	269.5	296.4	321.2	345.1	10.28	9.19	9.76
NONRESIDENTIAL	109.3	117.6	123.8	148.8	158.7	179.8	192.1	207.2	226.8	248.9	278.5	13.57	8.94	10.79
STRUCTURES	36.8	38.5	43.8	51.5	58.5	65.6	72.8	81.8	91.2	103.5	116.8	14.22	12.34	13.82
EQUIPMENT	65.3	69.1	88.8	89.3	109.1	113.4	119.2	126.2	135.6	145.5	154.6	13.28	6.78	9.35
RESIDENTIAL STRUCTURES	31.7	41.5	45.5	43.6	48.4	41.6	54.7	62.3	69.7	72.3	74.5	.82	10.11	6.78
NONFARM	31.1	41.8	44.8	42.9	39.7	48.9	49.9	61.5	68.9	71.4	73.6	-.87	10.19	6.73
CHANGE IN INVENTORIES	2.8	3.2	10.3	8.8	4.3	6.8	11.4	16.4	17.1	16.3	15.8	28.96	8.39	19.55
NET EXPORTS OF GOODS AND SERV	3.9	1.8	2.6	3.2	2.8	3.8	4.5	4.6	4.6	6.1	8.4	38.82	16.63	26.15
EXPORTS	62.9	67.9	72.1	78.8	83.5	98.8	97.1	105.8	113.7	124.2	135.4	7.32	8.66	7.97
IMPORTS	59.8	66.8	69.5	74.7	80.6	87.8	92.6	100.3	109.1	118.1	127.8	6.82	8.23	7.39
GOVERNMENT PURCHASES	219.6	232.6	250.3	272.9	296.7	322.1	349.4	378.9	411.5	448.9	487.8	8.68	8.78	8.57
FEDERAL	97.2	96.8	108.1	106.7	113.3	119.5	125.7	132.8	139.4	148.8	157.1	5.19	5.73	5.52
NATIONAL DEFENSE	75.3	72.8	74.8	76.9	80.3	83.6	87.1	90.5	96.3	98.1	102.1	3.82	4.85	3.95
OTHER	21.9	24.8	26.8	29.8	33.8	35.8	38.6	41.4	45.1	49.9	55.8	9.59	9.23	9.22
STATE AND LOCAL	122.2	135.7	158.2	166.2	183.4	202.6	223.6	246.9	272.1	300.9	330.7	10.53	10.27	10.39
TABLE 1.2 -- OTHER MAJOR ECONOMIC INDICATORS														
MONEY SUPPLY WITHOUT TIME DEP	212.5	224.4	239.5	256.1	274.3	296.5	321.1	346.3	371.5	395.4	417.6	7.25	6.79	7.14
MONEY SUPPLY WITH TIME DEPOSIT	423.6	478.1	527.1	572.4	622.8	681.8	743.7	814.5	887.1	961.4	1036.2	9.25	8.65	8.97
TREASURY BILL RATE, 91-DAY	6.44	4.14	4.63	5.11	4.99	4.73	4.46	4.12	3.87	3.88	3.88	2.17	-3.32	-1.24
CORPORATE BOND RATE, NEW ISSUE	9.25	7.98	7.93	7.77	7.46	7.22	7.15	6.88	6.52	6.23	5.99	-2.23	-4.33	-3.82
INDEX OF INDUS PROD, TOTAL	104.5	106.7	114.7	118.7	121.6	127.4	136.8	145.6	153.6	161.3	168.8	4.54	5.48	5.22
INDEX OF INDUS PROD, MFG.	105.1	104.9	113.6	116.2	117.1	122.2	131.3	140.1	148.2	155.9	163.5	3.87	5.63	5.84
INDEX OF INDUS PROD, STEEL	104.8	95.9	99.6	109.1	104.8	107.8	122.6	143.2	157.8	165.4	172.8	2.76	8.96	6.75
INDEX OF CAPACITY UTILIZATION	82.7	81.8	86.1	85.6	84.8	85.3	87.9	90.1	91.2	91.5	91.5	1.89	1.81	1.26
NEW PASSENGER CAR SALES, SAAR	8.44	10.33	11.25	11.14	10.58	10.47	11.46	12.47	13.82	13.45	13.88	.83	4.31	3.27
TOTAL PRIVATE HOUSING STARTS	1.46	2.48	1.99	1.77	1.59	1.68	2.84	2.41	2.59	2.68	2.61	-4.35	6.35	2.98
GNP IN 1958 DOLLARS	724.8	742.4	788.9	828.2	843.9	829.8	927.7	981.7	1033.9	1083.8	1131.1	4.33	5.88	5.79
IMPLICIT GNP DEFLATOR	135.3	141.6	146.1	152.4	158.3	163.6	167.8	171.6	175.6	179.8	184.8	3.69	2.34	2.96
CONSUMER PRICE INDEX	116.3	121.2	125.1	130.9	136.4	140.8	143.7	146.7	150.1	153.7	157.3	3.82	2.29	2.94
WHSL PRICE INDEX (INDUS COMM)	113.8	114.8	116.5	118.9	121.9	125.4	127.2	128.2	129.2	130.8	132.6	2.41	.67	1.52
PCT CHANGE IN GNPS (ANN RATE)	6.78	7.83	9.78	8.43	6.86	7.67	8.28	8.23	7.78	7.27	6.87	-.51	-4.31	-1.43
PCT CHANGE IN GNP58 (ANN RATE)	3.46	3.85	6.12	3.96	2.98	4.16	5.53	5.82	5.32	4.75	4.44	8.84	-5.35	4.24
PCT CHANGE IN GNP DEFLATOR	2.96	4.62	3.23	4.31	3.85	3.37	2.53	2.28	2.33	2.41	2.33	-7.59	-1.98	-7.31
PCT CHANGE IN CONS PRICE INDEX	4.38	4.19	3.27	4.61	4.21	3.18	2.06	2.14	2.32	2.38	2.38	-6.42	2.88	-6.42
DISPOSABLE PERSONAL INCOME	687.7	743.3	805.6	867.8	926.3	995.7	1055.9	1126.8	1201.8	1275.8	1351.8	7.31	6.37	6.86
CORP PROFITS WITHOUT IVA ADJ.	75.3	81.7	97.5	103.5	112.4	125.2	136.8	147.3	159.4	171.4	182.1	11.24	7.41	9.31
UNEMPLOYMENT RATE	5.2	5.9	5.3	5.8	6.2	6.2	5.8	5.7	5.7	5.7	5.7	1.27	-.54	-.54
PERSONAL SAVINGS RATE	7.8	8.1	7.9	7.4	7.5	7.5	7.6	7.2	7.8	6.7	6.6	-1.57	-3.17	-2.83
FEDERAL GOVT SURPLUS OR DEF	-13.7	-21.4	-18.2	-28.5	-25.1	-16.3	-14.8	-1.1	-.8	3.6	7.6	******	******	******

THIS FORECAST WAS PREPARED BY CHASE ECONOMETRICS, INC. ON JAN 1971 AND IS THE FORECAST IN A SET OF FORECASTS
THE PRINCIPLE ASSUMPTIONS FOR THIS RUN ARE RECESSION WITH 15% PERCENT PRICES

VARIABLE NAME	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	ANNUALIZED COMPOUND GROWTH RATES, YEARS- 1-5	6-10	1-10
TABLE 2.1 -- GROSS NATIONAL PRODUCT IN CONSTANT DOLLARS														
GROSS NATIONAL PRODUCT	720.4	742.8	788.9	824.2	843.9	870.4	927.7	981.7	1031.9	1083.8	1131.1	4.33	5.88	4.79
CONSUMPTION EXPENDITURES	496.5	493.9	521.8	545.7	563.2	584.2	614.6	646.1	677.9	706.9	734.6	4.29	4.56	4.51
DURABLE GOODS	92.3	89.5	94.9	97.9	100.3	105.8	114.7	122.5	129.1	135.8	140.4	4.86	5.19	5.17
NONDURABLE GOODS	287.3	283.5	296.6	306.9	314.3	323.8	334.5	345.8	357.4	368.2	389.8	4.32	3.97	4.19
SERVICES	191.3	198.9	208.3	218.9	218.6	226.3	235.4	247.8	261.5	273.8	285.2	4.35	4.91	4.64
GROSS PRIVATE INVESTMENT	109.8	109.8	122.4	125.2	125.9	133.6	143.3	156.8	165.8	173.1	179.9	5.22	5.98	5.72
FIXED INVESTMENT	108.8	106.1	114.6	119.2	122.8	128.9	135.2	144.8	154.2	162.2	169.4	4.98	5.88	5.33
NONRESIDENTIAL	79.2	78.6	86.3	93.3	100.3	106.7	109.2	114.8	120.9	128.9	136.8	7.93	5.65	6.27
STRUCTURES	24.3	23.8	23.7	26.6	28.2	29.3	33.6	32.4	34.7	37.5	40.2	6.28	7.87	6.38
EQUIPMENT	54.4	55.6	62.6	67.3	72.2	77.5	78.6	81.6	86.2	91.2	95.9	8.63	5.89	6.23
RESIDENTIAL STRUCTURES	29.3	27.4	28.2	25.3	22.4	22.1	26.8	30.8	33.3	33.4	33.3	-5.23	6.42	2.18
NONFARM	28.8	27.8	27.8	24.9	22.8	21.7	25.6	30.4	32.9	33.8	32.9	-5.31	6.51	2.21
FARM	.4	.6	.4	.4	.4	.4	.4	.4	.4	.4	.4	.88	.88	.88
CHANGE IN INVENTORIES	1.3	3.9	7.9	6.8	3.1	4.7	7.9	11.2	11.5	10.9	10.5	12.97	7.53	15.34
NONFARM	2.4	3.2	7.7	6.8	3.1	4.7	7.9	11.2	11.5	10.9	10.5	28.52	7.53	18.78
FARM	.7	.7	.1	.8	.8	.8	.8	.8	.8	.8	.8	******	******	******
NET EXPORTS OF GOODS AND SERV	2.4	1.4	4.5	4.4	3.9	3.7	4.9	5.4	5.6	6.4	7.6	26.88	11.33	28.21
EXPORTS	52.2	54.8	55.2	57.9	60.3	63.3	67.8	71.2	75.6	80.4	85.4	4.85	6.23	5.21
IMPORTS	49.8	53.4	50.7	53.5	56.4	59.6	62.1	65.8	69.9	74.8	77.8	3.18	5.88	4.44
GOVERNMENT PURCHASES	139.5	138.2	148.1	144.8	151.1	157.6	165.2	174.8	184.4	196.6	208.9	3.33	6.65	4.78
FEDERAL	65.4	61.2	58.9	58.7	59.9	61.3	63.2	65.8	67.6	70.9	74.5	.83	4.18	2.28
NATIONAL DEFENSE	58.7	45.5	43.6	42.3	42.5	42.9	43.8	44.6	45.7	47.8	48.4	-1.46	2.53	.69
OTHER	14.7	15.7	15.3	16.4	17.5	18.4	19.4	20.4	21.9	23.9	26.1	4.82	7.63	5.79
STATE AND LOCAL	77.8	77.8	81.2	86.1	91.2	96.3	101.9	109.1	116.8	125.7	134.4	5.75	7.16	6.39
TABLE 2.2 -- IMPLICIT PRICE DEFLATORS FOR GNP														
GROSS NATIONAL PRODUCT	135.3	141.6	146.1	152.4	158.3	163.6	167.8	171.6	175.6	179.8	184.8	3.69	2.34	2.96
CONSUMPTION EXPENDITURES	129.4	134.6	138.2	143.2	147.9	151.7	154.3	157.1	160.1	163.4	166.7	3.83	1.94	2.48
DURABLE GOODS	108.9	113.1	114.3	116.5	119.1	121.4	122.2	123.9	125.4	126.9	128.4	1.88	1.13	1.62
NONDURABLE GOODS	127.7	131.5	134.3	138.8	141.4	142.9	144.1	145.5	147.8	148.5	149.9	2.11	1.88	1.47
SERVICES	144.3	148.2	154.8	161.4	168.9	175.5	181.2	186.4	191.7	197.6	203.7	4.31	2.96	3.59
FIXED INVESTMENT	132.7	138.5	147.8	154.7	162.1	171.1	179.6	186.8	192.2	198.1	203.7	5.85	3.28	4.21
NONRESIDENTIAL	133.3	136.8	142.4	154.8	159.1	167.7	175.9	181.7	187.5	193.3	198.9	5.22	3.11	4.24
STRUCTURES	152.1	147.5	181.6	193.9	207.8	224.8	238.2	258.1	262.6	275.6	288.7	7.53	4.92	6.23
EQUIPMENT	128.1	124.1	127.7	132.6	138.7	146.4	151.7	154.6	157.3	159.4	161.2	4.21	1.54	2.94
RESIDENTIAL	142.4	151.2	161.8	172.1	188.1	187.6	194.8	281.8	289.1	216.4	223.5	5.54	3.49	4.43
NONFARM	142.4	151.3	161.1	172.2	188.1	187.8	195.8	281.9	289.2	216.5	223.5	5.55	3.47	4.43
FARM	138.6	145.2	155.8	163.8	171.8	179.8	185.5	195.8	283.8	211.8	219.8	5.36	4.24	4.66
CHANGE IN INVENTORIES	122.8	125.4	138.4	133.7	137.9	142.7	145.2	146.6	147.9	149.8	149.9	7.87	.81	3.99
EXPORTS	125.2	125.6	138.4	134.6	138.5	142.1	144.8	147.4	158.4	154.5	158.6	3.14	2.29	2.62
IMPORTS	118.6	127.1	136.9	139.8	142.8	145.9	149.8	152.5	155.9	159.5	163.2	3.51	2.38	2.81
GOVERNMENT PURCHASES	157.4	168.3	178.7	188.5	196.4	206.4	211.5	217.7	223.1	228.3	233.5	4.97	2.58	3.78
FEDERAL	149.7	158.2	174.1	181.9	189.2	194.9	198.8	203.2	206.2	208.6	210.9	5.35	1.49	3.24
STATE AND LOCAL	165.3	176.3	184.9	193.1	201.1	214.4	219.3	226.4	232.9	239.5	246.8	4.51	2.98	3.76

THIS FORECAST WAS PREPARED BY CHASE ECONOMETRICS, INC. ON JAN 1971 AND IS THE FORECAST IN A SET OF FORECASTS
THE PRINCIPLE ASSUMPTIONS FOR THIS RUN ARE RECESSION WITH PRICES(15%) AND GOV. OFFSET(15%)

VARIABLE NAME	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	ANNUALIZED COMPOUND GROWTH RATES, YEARS- 1-5	6-10	1-10
TABLE 1.1 -- GROSS NATIONAL PRODUCT IN CURRENT DOLLARS														
GROSS NATIONAL PRODUCT	974.1	1058.4	1153.8	1258.2	1341.8	1461.2	1593.4	1729.1	1863.6	2003.6	2152.1	8.4%	7.8%	8.2%
CONSUMPTION EXPENDITURES	615.9	664.9	721.3	781.6	833.9	893.2	965.5	1035.6	1109.3	1185.6	1263.9	7.6%	6.9%	7.3%
DURABLE GOODS	104.7	101.3	108.5	114.8	110.7	120.4	144.2	155.4	165.8	176.5	186.5	6.2%	6.6%	7.4%
NONDURABLE GOODS	264.7	283.6	304.4	327.1	344.8	364.4	387.4	408.8	429.7	452.2	475.3	6.7%	5.2%	6.0%
SERVICES	262.5	283.9	308.4	340.5	369.4	399.4	433.8	472.3	513.8	556.8	602.1	9.8%	8.5%	8.7%
GROSS PRIVATE INVESTMENT	136.4	152.3	178.7	192.4	233.9	232.7	263.8	294.3	319.2	344.8	374.6	11.1%	8.8%	10.3%
FIXED INVESTMENT	133.8	149.1	168.5	184.4	199.6	224.4	249.5	276.6	302.9	328.4	354.5	10.7%	9.1%	10.0%
NONRESIDENTIAL	109.3	117.6	123.8	140.8	158.9	181.5	197.2	213.9	234.9	259.6	283.1	11.0%	9.4%	11.3%
STRUCTURES	36.8	38.5	43.8	51.5	58.5	65.9	73.9	83.2	94.7	108.3	121.9	14.1%	13.3%	13.6%
EQUIPMENT	65.3	69.1	88.8	89.3	100.4	115.6	123.3	130.7	140.2	151.3	161.2	13.7%	6.9%	9.8%
RESIDENTIAL STRUCTURES	31.7	41.5	45.5	43.6	43.7	42.8	52.2	62.7	68.8	68.8	71.5	.7%	8.1%	6.2%
NONFARM	31.1	41.8	44.8	42.9	40.8	42.1	51.5	61.9	67.2	68.8	70.6	.6%	8.2%	6.2%
CHANGE IN INVENTORIES	2.8	3.2	10.3	8.8	4.3	7.9	14.4	17.7	16.3	16.3	16.1	25.9%	2.8%	19.8%
NET EXPORTS OF GOODS AND SERV	3.9	1.8	2.6	3.2	2.9	2.5	2.9	2.1	2.1	3.3	5.3	24.3%	16.5%	19.9%
EXPORTS	62.9	67.9	72.1	78.8	83.5	90.3	97.1	105.8	113.8	124.3	135.7	7.3%	8.7%	8.0%
IMPORTS	59.0	66.8	69.5	74.7	80.6	87.8	94.2	102.9	111.6	121.0	130.3	6.9%	8.4%	7.7%
GOVERNMENT PURCHASES	219.4	232.6	258.3	272.9	301.2	333.3	361.4	397.8	432.9	469.8	512.1	9.4%	9.1%	9.1%
FEDERAL	97.2	96.8	108.1	108.7	113.3	119.5	125.7	138.1	149.1	156.9	164.2	5.1%	6.0%	5.8%
NATIONAL DEFENSE	75.3	72.3	74.8	76.9	80.3	83.6	87.1	90.5	94.3	98.1	102.1	3.8%	4.8%	3.9%
OTHER	21.9	24.8	26.3	29.8	33.0	35.8	38.6	47.6	54.8	58.8	62.1	9.5%	12.5%	10.7%
STATE AND LOCAL	122.2	135.7	150.2	164.2	187.9	213.8	235.6	259.8	283.8	312.9	347.9	12.1%	10.2%	11.1%
TABLE 1.2 -- OTHER MAJOR ECONOMIC INDICATORS														
MONEY SUPPLY WITHOUT TIME DEP	212.5	224.4	239.5	256.1	274.7	299.9	329.1	357.4	386.9	416.8	443.9	7.5%	7.8%	7.8%
MONEY SUPPLY WITH TIME DEPOSIT	424.6	478.1	527.1	572.4	624.3	691.6	764.7	841.7	922.4	1004.8	1087.6	9.6%	9.2%	9.5%
TREASURY BILL RATE, 91-DAY	6.44	4.34	4.63	5.33	4.75	4.17	3.93	3.77	3.58	3.59	3.69	-.9%	-1.3%	-1.1%
CORPORATE BOND RATE, NEW ISSUE	9.05	7.98	7.93	7.77	7.15	6.93	6.74	6.41	5.97	5.71	5.59	-3.2%	-4.5%	-3.7%
INDEX OF INDUS PROD, TOTAL	106.5	106.7	114.7	118.7	121.8	128.5	139.7	147.9	155.2	163.8	172.4	4.8%	5.8%	5.3%
INDEX OF INDUS PROD, MFG.	105.1	104.9	113.4	116.2	117.3	123.7	134.4	142.6	149.9	157.9	165.3	4.2%	5.3%	5.1%
INDEX OF INDUS PROD, STEEL	134.8	95.9	99.4	109.1	104.6	118.7	129.9	140.6	157.6	163.3	172.2	3.6%	6.9%	5.5%
INDEX OF CAPACITY UTILIZATION	82.7	81.5	86.1	85.6	84.1	86.1	89.2	90.9	91.7	92.1	92.8	1.2%	.7%	1.3%
NEW PASSENGER CAR SALES, SAAR	6.46	13.33	11.25	11.14	10.62	10.92	12.84	12.78	13.35	13.81	14.12	1.4%	4.8%	3.5%
TOTAL PRIVATE HOUSING STARTS	1.46	2.38	1.99	1.77	1.61	1.73	2.38	2.38	2.48	2.43	2.45	-3.4%	4.1%	2.2%
GNP IN 1958 DOLLARS	729.8	742.8	788.9	828.2	847.4	891.7	947.9	1002.3	1051.3	1099.2	1147.6	4.7%	4.8%	4.9%
IMPLICIT GNP DEFLATOR	135.3	141.6	146.1	152.4	158.4	163.8	168.1	172.5	177.2	182.3	187.5	3.7%	2.7%	3.1%
CONSUMER PRICE INDEX	116.3	121.2	125.1	130.9	136.4	140.7	143.8	147.5	151.7	156.2	160.9	3.8%	2.8%	3.2%
WHSL PRICE INDEX (INDUS COMM)	118.8	114.8	116.5	118.9	121.9	125.5	127.3	128.5	129.8	131.8	132.1	2.4%	.9%	1.6%
PCT CHANGE IN GNPS (ANN RATE)	6.7%	7.8%	9.7%	8.4%	7.3%	8.3%	9.2%	8.5%	7.7%	7.5%	7.4%	3.2%	-4.8%	-.8%
PCT CHANGE IN GNP58 (ANN RATE)	3.8%	3.4%	6.3%	3.9%	3.2%	5.2%	6.3%	5.7%	4.8%	4.5%	4.4%	14.6%	-8.5%	4.1%
PCT CHANGE IN GNP DEFLATOR	2.9%	4.6%	3.2%	4.3%	3.9%	3.4%	2.5%	2.6%	2.7%	2.8%	2.8%	-7.1%	2.7%	-5.1%
PCT CHANGE IN CONS PRICE INDEX	4.3%	4.1%	3.2%	4.6%	4.2%	3.1%	2.2%	2.5%	2.8%	2.9%	2.9%	-6.7%	7.8%	-3.4%
DISPOSABLE PERSONAL INCOME	687.7	743.3	805.4	867.8	927.9	997.8	1076.3	1147.1	1227.2	1309.1	1395.3	7.6%	6.7%	7.2%
CORP PROFITS WITHOUT IVA ADJ.	75.3	81.7	97.5	103.5	112.3	128.6	142.3	152.5	164.7	177.8	189.8	12.8%	7.4%	9.8%
UNEMPLOYMENT RATE	5.8	5.9	5.3	5.8	6.2	6.1	5.5	5.5	5.4	5.4	5.4	.6%	-.5%	-1.8%
PERSONAL SAVINGS RATE	7.8	8.8	7.9	7.4	7.6	7.8	7.7	7.1	7.8	6.7	6.7	-.5%	-3.6%	-1.9%
FEDERAL GOVT SURPLUS OR DEF	-13.7	-21.4	-18.2	-28.5	-25.9	-21.7	-21.4	-13.6	-11.7	-4.8	.5	******	******	******

THIS FORECAST WAS PREPARED BY CHASE ECONOMETRICS, INC. ON JAN 1971 AND IS THE FORECAST IN A SET OF FORECASTS
THE PRINCIPLE ASSUMPTIONS FOR THIS RUN ARE RECESSION WITH PRICES(158) AND GOV. OFFSET(158)

VARIABLE NAME	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	ANNUALIZED COMPOUND GROWTH RATES,YEARS- 1-5	6-10	1-10
TABLE 2.1 -- GROSS NATIONAL PRODUCT IN CONSTANT DOLLARS														
GROSS NATIONAL PRODUCT	720.0	742.0	788.9	828.2	847.0	891.7	947.9	1002.3	1051.3	1099.2	1147.6	4.78	4.89	4.96
CONSUMPTION EXPENDITURES	496.5	493.9	521.8	545.7	563.7	588.9	625.4	656.6	687.2	716.4	744.8	4.58	4.48	4.66
DURABLE GOODS	92.1	89.5	94.9	97.9	100.5	104.5	117.4	124.8	131.4	137.6	143.3	4.41	5.12	5.36
NONDURABLE GOODS	207.3	213.5	226.6	236.9	244.5	254.9	268.6	279.4	290.5	301.7	313.0	4.53	3.90	4.34
SERVICES	191.3	198.9	208.3	218.9	218.7	227.6	239.1	252.4	265.3	277.1	288.5	4.49	4.81	4.89
GROSS PRIVATE INVESTMENT	109.0	109.0	122.4	125.2	126.2	136.6	148.6	160.1	167.0	174.2	180.9	5.81	5.04	5.79
FIXED INVESTMENT	108.0	106.1	114.6	119.2	123.1	131.0	139.7	148.0	156.1	163.3	170.3	5.43	5.26	5.48
NONRESIDENTIAL	79.2	78.6	86.3	93.9	100.5	108.3	112.1	117.3	124.1	132.2	139.3	8.12	5.58	6.55
STRUCTURES	24.2	23.0	23.7	26.6	28.2	29.4	30.9	33.1	35.6	38.6	41.2	6.38	7.45	6.69
EQUIPMENT	54.4	55.6	62.6	67.3	72.4	78.9	81.1	84.2	88.4	93.6	98.0	9.13	4.84	6.49
RESIDENTIAL STRUCTURES	22.2	27.4	28.2	25.3	22.6	22.0	26.7	30.7	32.0	31.1	31.1	-4.56	3.89	1.38
NONFARM	28.0	27.0	27.8	24.9	22.2	22.4	26.3	30.3	31.6	30.7	30.7	-4.83	3.95	1.48
FARM	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.88	.88	.88
CHANGE IN INVENTORIES	1.3	2.9	7.9	6.3	3.1	5.6	9.9	12.1	10.9	10.9	10.6	17.57	1.74	15.42
NONFARM	2.3	2.2	7.7	6.0	3.1	5.6	9.9	12.1	10.9	10.9	10.6	25.42	1.74	18.78
FARM	.7	.7	.1	.0	.0	.0	.0	.0	.0	.0	.0	******	******	******
NET EXPORTS OF GOODS AND SERV	3.4	1.4	4.5	4.4	3.0	3.4	3.9	3.6	3.7	4.0	4.6	21.47	5.84	13.85
EXPORTS	52.2	54.0	55.2	57.9	60.3	63.4	67.0	71.0	75.2	79.8	84.5	4.86	5.95	5.08
IMPORTS	49.0	52.6	50.7	53.5	56.4	60.0	63.2	67.4	71.5	75.8	79.9	3.15	6.08	4.74
GOVERNMENT PURCHASES	139.5	139.2	148.1	144.0	153.3	162.5	170.5	182.0	193.4	204.5	217.2	4.19	6.24	5.15
FEDERAL	65.4	61.2	58.9	58.7	59.9	61.3	63.2	67.9	72.2	74.9	77.4	.83	5.19	2.64
NATIONAL DEFENSE	50.7	45.5	43.6	42.3	42.5	42.9	43.0	44.5	45.6	46.9	48.1	-1.46	2.39	.82
OTHER	14.7	15.7	15.3	16.4	17.5	18.4	19.4	23.4	26.5	28.1	29.3	4.81	10.79	7.16
STATE AND LOCAL	77.0	77.0	81.2	86.1	93.4	101.6	107.3	114.1	121.3	129.6	139.8	7.14	6.84	6.99
TABLE 2.2 -- IMPLICIT PRICE DEFLATORS FOR GNP														
GROSS NATIONAL PRODUCT	135.3	141.6	146.1	152.4	158.4	163.0	168.1	172.5	177.2	182.3	187.5	3.72	2.77	3.17
CONSUMPTION EXPENDITURES	129.4	134.6	138.2	143.2	147.9	151.6	154.5	157.7	161.4	165.5	169.7	3.43	2.38	2.81
DURABLE GOODS	108.9	113.1	114.3	116.5	119.1	121.5	122.9	124.4	126.3	128.3	130.2	1.41	1.45	1.57
NONDURABLE GOODS	127.7	131.5	134.3	138.0	141.0	142.9	144.2	146.0	147.9	149.9	151.9	2.12	1.38	1.81
SERVICES	148.2	148.2	154.0	161.4	168.9	175.5	181.4	187.1	193.6	200.9	208.7	4.32	3.54	3.87
FIXED INVESTMENT	132.7	140.5	147.0	154.7	162.1	171.2	179.8	186.8	194.0	201.1	208.1	5.05	3.73	4.46
NONRESIDENTIAL	138.0	136.0	142.4	150.0	158.0	167.6	176.0	182.3	189.3	196.1	203.2	5.21	3.67	4.49
STRUCTURES	152.1	167.5	181.6	193.9	207.8	224.3	238.9	251.6	265.4	280.4	295.5	7.57	5.46	6.58
EQUIPMENT	128.1	124.1	127.7	132.6	138.7	146.5	151.9	155.2	159.6	161.6	164.4	4.23	1.99	3.17
RESIDENTIAL	142.4	151.2	161.0	172.1	180.1	188.0	195.8	203.7	212.3	221.2	230.1	5.59	4.11	4.77
NONFARM	142.4	151.3	161.1	172.2	180.3	188.1	196.0	203.9	212.4	221.3	230.2	5.59	4.11	4.77
FARM	138.6	145.2	155.0	163.0	171.0	179.0	185.5	195.0	203.0	211.0	219.0	5.36	4.24	4.66
CHANGE IN INVENTORIES	134.0	135.4	138.4	143.7	147.9	152.0	155.3	157.0	158.0	158.4	159.9	7.89	1.12	4.14
EXPORTS	125.3	125.6	128.4	134.6	138.5	142.1	144.9	147.0	151.2	155.0	160.6	3.14	2.81	2.77
IMPORTS	118.6	127.1	136.9	139.0	142.0	145.9	149.1	152.6	156.0	159.6	163.3	3.51	2.31	2.82
GOVERNMENT PURCHASES	157.4	168.3	178.7	188.5	196.4	204.6	211.9	219.1	223.0	229.7	235.0	5.00	2.78	3.81
FEDERAL	148.7	158.2	168.1	181.9	189.1	195.0	198.9	203.3	206.6	209.4	212.1	5.36	1.62	3.31
STATE AND LOCAL	165.0	176.3	184.9	193.1	201.1	210.5	219.6	226.9	234.0	241.4	248.9	4.52	3.10	3.98